013163

JPRS 82324

26 November 1982

Worldwide Report

ENVIRONMENTAL QUALITY

No. 379



19990510 088

Approved for public release;
Distribution Unlimited

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

7 90 A Ø5 JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports Announcements</u> issued semi-monthly by the National Technical <u>Information Service</u>, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the <u>Superintendent of Documents</u>, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS 82324

26 November 1982

WORLDWIDE REPORT ENVIRONMENTAL QUALITY

No. 379

CONTENTS

ASIA

Attorney General: Canberra Can Halt Tasmania Dam (Simon Balderstone; THE AGE, 9 Oct 82)	1
 NSW Government Wants Firm To Pay for Radioactive Clean-Up (Pam Bornhorst; THE WEEKEND AUSTRALIAN, 9-10 Oct 82)	3
Victorian Government Report Opens Door to Woodchip Industry (Rosslyn Beeby; THE AGE, 11 Oct 82)	4
Radioactive Sand Found Dumped in Brisbane Suburbs' Yards (Peter Morley; THE COURIER-MAIL, 16 Oct 82)	6
WA Labor Party Said To Be in Hands of Environmentalists (THE WEST AUSTRALIAN, 15 Oct 82)	. 8
Briefs	

Reef Oil Risk Study

Auto Emission Controls

Toxic-Waste Disposal Plan Soil Conservation Policy

Drought Pollution Threat

First 'Environmental Living' Zone

INDIA

AUSTRALIA

Experts Appointed To Review Environmental Laws (PATRIOT, 31 Oct 82)	12
Gandhi Speaks to Forestry Ministers Conference (THE HINDU, 19 Oct 82)	13

9

9

10

10

	Cooperation With Nepal in Himalayas Orged	14
	(PATRIOT, 15 Oct 82)	14
	Briefs	
	Port Pollution Officers	15
	Forest Acreage Loss	15
NEW ZE	CALAND	
	Proposed Geothermal Power Site Has High Mercury Levels	
	(THE NEW ZEALAND HERALD, 16 Sep 82)	16
	Pollution Controls Boost Steel Mill Expansion Costs	
	(THE EVENING POST, 7 Oct 82)	17
	Briefs	
	Ecological Maps	18
	Marine Park	18
PHILIP	PINES	
	Three Top Polluters of Rivers Listed (VISAYAN HERALD, 7 Oct 82)	19
	(120111111 11211112), / 002 02/	
	EAST EUROPE	
CZECHO	OSLOVAKIA	
	Institute of Country Ecology Described	
	(Jaromir Pospisil Interview; TVORBA, 15 Sep 82)	20
POLAND		
LOMMIN		
	Development of Environmental Pollution Outlined	
	(Various sources, various dates)	26
	Environmental Situation Report	
	Air Pollution Situation	
	SUB-SAHARAN AFRICA	
SOUTH	AFRICA	
	Briefs	
	Kruger Animals Dying	30
	Bush Encroachment	30 31
	Pesticides in Food	ЭŢ

ZIMBABWE

(THE HERALD, 29 Oct 82)	32
Briefs Midlands Drought	34
	•
USSR	
Decree on Protection of Atmosphere Promulgated (VEDOMOSTI VERKHOVNOGO SOVETA ROSSUYSKOY SOVETSKOY FEDERATIVNOY SOTSIALISTICHESKOY RESPUBLIKI, 22 Jul 82)	35
Presidium Decree on Animao Protection, Utilization (VEDOMOSTI VERKHOVNOGO SOVETA ROSSIYSKOY SOVETSKOY FEDERATIVNOY SOTSIALISTICHESKOY RESPUBLIKI, 22 Jul 82)	54
Socialist Approach to Ecological Problems Lauded (V. Kortunov; SOVETSKAYA LITVA, 15 Sep 82)	73
WEST EUROPE	
FEDERAL REPUBLIC OF GERMANY	
Officials' Statements Reflect Environmental Policy Change (DER SPIEGEL, 11 Oct 82)	77
SWEDEN	
Government Commission To Test, Approve Chemical Substances (Claes-Goran Kjellander; SVENSKA DAGBLADET, 29 Sep 82)	78
Bill Would Increase Penalties for Ships Discharging Oil (Claes Lofgren; SVENSKA DAGBLADET, 30 Sep 82)	80
'Acid Rain' Is Catalist for Arsenic Discharges (SVENSKA DAGBLADET, 17 Oct 82)	82
Stockholm Police Crack Down on Excess Carbon Monoxide From Ca (Henrik Ekman; SVENSKA DAGBLADET, 19 Oct 82)	

ATTORNEY GENERAL: CANBERRA CAN HALT TASMANIA DAM

Melbourne THE AGE in English 9 Oct 82 pp 1, 15

[Article by Simon Balderstone]

[Excerpts] Canberra--The Federal Government has international responsibilities to intervene to preserve south-west Tasmania, according to a legal opinion from the Attorney-General's Department.

The opinion says that the Federal Government has substantial constitutional powers that could be used to preserve the area and any decision not to intervene must therefore "be based on political grounds."

It says Australia has international obligations and responsibilities--set out in the World Heritage Convention--regarding "natural heritage" whether or not the property is included on the World Heritage List.

Amid growing public reaction against the dam scheme, the Department of Home Affairs and the Environment has been asked to prepare a detailed submission for Cabinet on the wilderness area and the dam proposal.

The legal opinion from the Attorney-General's department says Australia has clearly "identified and delineated" south-west Tasmania as part of its natural heritage by nominating the area for inclusion on the world list.

"I do not think that a party, having identified an area as part of its 'natural heritage,' can claim that it is no longer such an area simply because its preservation is politically difficult or expensive, or because it is an impediment to industrial works," says Mr D.J. Rose in the legal opinion.

He says the Commonwealth has wide constitutional powers and relevant statutory powers to intervene in south-west Tasmania, so it is unmecessary to consider external affairs powers.

The legal opinion, a copy of which has been seen by 'The Age,' was prepared after advice was requested concerning the Commonwealth's nomination of south-west Tasmania for inclusion in the world list. The list is established under the UNESCO convention for the protection of the world cultural and natural heritage.

The nomination was made on the recommendation of the former Tasmanian Labour Government headed by Mr Doug Lowe.

The present Premier, Mr Gray, has asked the Prime Minister to withdraw the nomination, but the Federal Government has stood firm, with Mr Fraser believed to have been angry over the request.

A study of the legal opinion reveals that Mr Gray sent a telex on 29 June referring to Tasmania's "sovereignty" and "autonomy" in the matter.

"Of course, such feferences are constitutionally incorrect. A State only has 'sovereignty' subject to the Commonwealth Constitution and therefore subject to any valid Commonwealth legislation," the legal opinion says.

"The Commonwealth has substantial constitutional powers that could be used to preserve south-west Tasmania; any decision to intervene must therefore be based on political grounds, not any constitutional impediments."

The opinion says that the reasons stated by Mr Gray in his 29 June telex (requesting withdrawal of the nomination) were clearly not grounds on which Australia could claim that the area is no longer part of the "natural heritage."

"It follows that the area has been identified by Australia as part of its natural heritage within the meaning of the convention and it would therefore seem impossible for Australia to deny that it is part of that heritage within the meaning of the convention and that it has international obligations under the convention in relation to it," the legal opinion says.

It says that, in addition to express constitutional powers, the Commonwealth has so-called "inherent power" to do "all things appropriate for a national Government."

Power already exists under the National Parks and Wildlife Conservation Act 195 to acquire the area as a Commonwealth National Park and the Lands Acquisition Act also provides the Commonwealth with relevant statutory powers.

It is constitutionally open to the Government to make grants to Tasmania for the purpose of financing alternative schemes of power generation," or even to make all grants to Tasmania conditional upon its not building a dam."

NSW GOVERNMENT WANTS FIRM TO PAY FOR RADIOACTIVE CLEAN-UP

Canberra THE WEEKEND AUSTRALIAN in English 9-10 Oct 82 p 5

[Article by Pam Bornhorst]

[Text]

A LEGAL battle looms over the removal of tonnes of radioactive soil from the northern NSW coastal town of Byron Bay.

The contamination was revealed earlier this year after a Sydney University physicist, Dr Murray Winn, tested the local soil and found unacceptably high levels of radiation.

The Health Commission has since concluded contamination was caused by concentrations of the naturally radioactive mineral, monazite, which was in waste dumped during sand mining operations at Byron Bay between 1934 and 1975.

Radiation experts have already ordered the removal of radioactive soil from the local primary school and two areas near the centre of the town.

But surveys over the past six months have revealed unacceptable levels of radioactivity at a num-

ber of other locations, including 25 homes, the Baby Health Centre, the Girl Guides Hall, and the hospital.

The NSW Government wants the mining company responsible, Perth-based Associated Minerals Consolidated Limited (AMC), to pay the full cost of the clean-up, estimated at more than \$750,000.

During a visit to Byron Bay yes-

terday, the NSW Minister for Health, Mr Brereton, described the situation as "totally unacceptable". He said the Government would take joint legal action with local citizens to force AMC to "fulfill its ebligations"

Abandoned

If necessary, it would pursue the matter as far as the High Court.
Mr Brereton said people wanting to take separate legal action against AMC would be considered for legal aid by the Legal Services Commission for NSW.

The State Government announced yesterday it would not be closing down sections of the Byron Bay Hospital affected by radioactive waste. Instead, the contaminated material would be cleared at an initial cost of \$50,000.

The Health Commission had recommended in the report earlier this year that some of the hospital's services be transferred to nearby Mullumbimby because of the radiation scare. Mr Brereton said this idea had been abandoned because the Government did not have the necessary funds.

Health authorities were alerted to the elevated radiation levels in the Byron Bay soil by an exclusive report in *The Australian* in January. The paper had been contacted by a former employee of the sand mining plant who was concerned about the dangers of the dumped waste.

AMC last night defended its offer to pay only a percentage of the cost of cleaning up.

The chairman of the company, Mr L.W. Skelton, said he was surprised and disappointed at Mr

Brereton's response to the company's proposal, and his "threat of legal action".

The company had submitted the final proposal only yesterday, and Mr Brereton had indicated it was "worthy of consideration".

Mr Skelton said the sand mining operations were carried out in Byron Bay over a period of 40 years on a lease held by Zircon Rutile Pty Ltd, which was acquired by AMC in 1962, 13 years before mining ceased.

AMC believed most if not all the contamination occurred before the acquisition.

The company did not admit any liability but had agreed to clean up all affected areas which it "now occupies or had occupied." But it refuses to accept responsibility for areas owned, occupied or controlled by either the council or the Government.

The company says it is prepared to pay a third of the cost of clearing private homes.

VICTORIAN GOVERNMENT REPORT OPENS DOOR TO WOODCHIP INDUSTRY

Melbourne THE AGE in English 11 Oct 82 p 5

[Article by Rosslyn Beeby]

[Text]

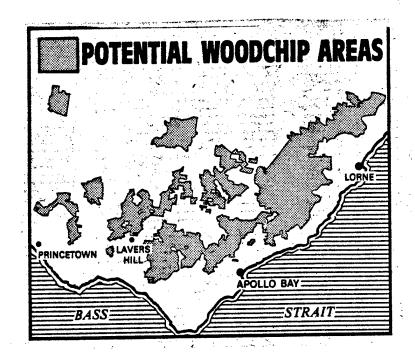
A State Government report has recommended that an export wood-chip industry be developed in the Otway Ranges.

The report says that 70,000, tonnes of pulp wood a year could be harvested for wood chips, using waste from existing sawlog operations. It estimates that the industry could be worth \$4.5 million and create up to 70 local jobs.

The report also calls for stricter management controls on logging operations on public and private land, to protect wildlife and sites of geological, geomorphological and archaeological significance.

The State Government has previously voiced strong opposition to establishing a woodchip industry in the Otways. The Minister for Forests, Mr Mackenzie, announced a moratorium earlier this year on pulp-wood harvesting licences in the area, until a detailed economic and environmental effects assessment had been carried out.

Mr Mackenzie was unavailable for comment yesterday, but a spokesman for the Ministry said the report should not be viewed as Government policy. He said the Ministry was unlikely to make any decision to lift the Otway moratorium until early next year, when all public comment on the report had been considered.



The report, commissioned last The report, commissioned last December, was compiled by an inter-departmental task force chaired by the Ministry of Economic Development. It included representatives from the Forests Commission, Ministry of Water Resources and Supply, Ministry of Conservation. Department of of Conservation, Department of Planning, Ministry of Tourism and the Soil Conservation Auth-

The task force was asked to examine the economic benefit of wood chipping in the Otways, the effect on water quality and quantity and the impact of timber production on the Otway State Forest.

The report concludes;

• Waste from saw log operations in mountain forests clear-

felled for regeneration can be harvested with little environmental impact if appropriate management practices are adopted.

- Harvesting of pulp wood in foothill forests potentially involved greater hazards to the environment and to water quality.
- The maximum quantity of pulp wood for an economically viable wood-chip operation would be 70,000 tonnes a year.
- The existing controls on private forestry in the Otways be amended and rationalised before pulp wood harvested is allowed on public land.

The report also suggests tighter management guidelines for wildlife protection, including creation of wildlife reserves, retention of hollow trees used for nesting, a nonow trees used for nesting, a series of comprehensive wildlife research programmes and the employment of wildlife biologists to advise forest management staff.

A spokesman for the Geelong Environment Council, Ms Joan Lindros, called the report "a bit-ter disappointment." She said it was clearly intended to open the way for a wood-chipping operation in the Atways. "The forests are already overcut and over-committed to make the extraction of saw logs economic. What we need is a change of philosophy in the management of the whole area."

"The average amount of residue from existing operations varies from 10,000 to 20,000 tonnes a year. If that rises to 70,000 tonnes the destructive impact on the forest will be so much greater."

The general manager of the Victorian Sawmillers' Association, Mr Tom Brabin, said he was pleased that the task force had seen merit in utilising rather than wastefully burning saw-logging and silviculture residue. But he said he was astounded at the assumption that pulp wood harvest-ing in foothill forests was environmentally hazardous.

"It is obvious that some members of this task force had preconceived ideas which they thrust down the throats of other members," he said.

RADIOACTIVE SAND FOUND DUMPED IN BRISBANE SUBURBS' YARDS

Brisbane THE COURIER-MAIL in English 16 Oct 82 p 1

[Article by Peter Morley]

[Text] Truckloads of sand containing up to 10 times the acceptable radioactive safety level have been dumped in suburban Brisbane house yards.

And thousands of tonnes of the sand, waste from Queensland coastal rutile works, have been used throughout the south-east corner of the state for fill, top-dressing and construction.

On the Gold Coast, tests have shown that the radioactive level of land on the Currumbin Estuary where rutile was mined is double that recommended by the National Health and Medical Research Council.

This was confirmed last night by the Health Minister, Mr Austin, who said the public use of the potentially dangerous sand had come to light only this week as a result of Government investigations.

He said any person who suspected they had used the offending material should contact his department whose scientists. would carry out checks, although this would take some time because of the expected number of requests.

Where positive findings were established, it would be the responsibility of the property owner to remove it.

The problem for the Government is that it has no idea where much of the sand waste has been dumped and over what time span. It may have been carted away from rutile works since they began operations 30 years ago.

And the half-life of the radioactive nuclides thorium-232 and its daughters which are contained in the tailings is

about 10,000 million years.
Mr Austin said there was significant concern for public health because of the penetrating nature of the gamma radiation emitted by the nuclides and the emission of the radioactive gas Radon 220.

Departmental scientists had already identified several Brisbane properties where the sand was deposited, after owners sought checks when the Government investigation began.

"In a minority of these cases, the radiation levels for the property were significantly higher than the background radiation level in the immediate neighborhood," he said.

He confirmed that in Brisbane, some of the tests had shown a radioactive reading 10 times higher than the accepted safety level recommended by the council.

Mr Austin said the Brisbane results had shown up in an investigation he ordered 10 months ago after dangerously high radiation levels through sand mining were found at the Byron Bay Hospital in New South Wales.

"This survey has revealed there are areas of unacceptably high radio-activity in Queensland," he said. [Editor's Note: THE WEEKEND AUSTRALIAN of 16-17 October 1982, page 3, carried this report:]

Dangerous levels of radioactivity have been found in the car park of a popular Gold Coast beach and in an industrial area of Maryborough, 350 km north of Brisbane.

Three "hot spots" where the radiation readings were twice the acceptable level were detected at Currumbin beach on the Gold Coast.

The car park was built on the site of a rutile extraction plant which operated for about 25 years until 1976.

The Queensland Minister for Health, Mr Austin, said health department scientists had identified a number of private residential properties where the radioactive sand had been deposited.

The Gold Coast City Council is checking Southport, Tugun and Broadbeach.

The radiation at Currumbin was found after a check was requested by a council alderman, Mr Trevor Coomber. Council bulldozers removed 95 meters of fill to the council dump which is closed to the public.

WA LABOR PARTY SAID TO BE IN HANDS OF ENVIRONMENTALISTS

Perth THE WEST AUSTRALIAN in English 15 Oct 82 p 19

[Text]

THE WA Labor Party has become a captive of discredited environmental extremists who have taken over its resource-development policies, says a Liberal back-bencher.

Mr Tom Herzfeld (Mundaring) told State Parliament that the ALP's for estry policies were untenable, particularly in relation to the Shannon River basin.

Supporting the Government's forestry policies in the Legislative Assembly, he moved for a proposal to withdraw the basin from wood production to be rejected.

There was no proved environmental benefit to be gained and such a move would adversely affect the sound management and protection of the karri forest, Mr Herzfeld said.

Jobs would be jeopardised, causing major social dislocation and stress.

The Opposition's spokesman on forests. Mr Dave Evans (Warren) said that the motion showed Mr Herzield's total lack of understanding of forestry management.

issue

[The Shannon River basin became an issue at this year's ALP State conference when Mr Evans and his parliamentary colleagues sought to change the Labor commitment to a 500 sq km national park in the area.

The party's conservation lobby successfully fought off the move, by Mr Evans and speculation about his future with the party. However, the conference later defused the issue by writing into its policy a guarantee of jobs in the timber industry.]

Mr Evans moved an amendment to the motion, seeking to substitute an Opposition one.

The motion calls on the Government to sti-

mulate home-building programmes to help the timber, and associated industries.

Restore

It also calls for the intensive treatment of at least 20 sq km a year of degraded hardwood forest, to restore its production potential. It urges the Government to develop alternative jobs for timber industry workers who will be made redundant by the decrease in sawlog intake to timber mills.

Mr Evans said that the Government should find out from the Federal Government how the dumping of New Zealand timber in Australia would be prevented.

The debate was adjourned.

cso: 5000/7510

BRIEFS

REEF OIL RISK STUDY--A priority study of the potential risks of oil spills on the Great Barrier Reef will be carried out at James Cook University at Townsville. This follows the release of Federal Government grants. The grants, for marine science research at the university, total \$450,000 of which almost \$70,000 will support the reef study. It will be based in the Sir George Fisher Centre for Tropical Marine Studies where a team of scientists will be led by the centre director, Dr Joe Baker. Dr Baker said yesterday the four-year project was one of the Federal Marine Sciences and Technologies Grants program's priority research areas. It had been given priority status in 1979 after a joint statement on oil drilling by the Prime Minister Mr Fraser and the Premier, Mr Bjelke-Petersen. The statement said there should be no drilling in the reef region until long and shortterm research results were known. Dr Baker said researchers would not start the study with the view that oil could be harmful to the reef. "I donttthink any researcher should assume the negative," he said. "In fact it may be found that small quantities of oil could be quite valuable to the reef's ecosystem. But that is something we have to determine." Tests in the centre would gauge the effect oil had on a variety of marine plants and animals, including coral, sponges and clams. [Text] [Brisbane THE COURIER-MAIL in English 7 Oct 82 p 5]

FIRST 'ENVIRONMENTAL LIVING' ZONE--Australia's first environmental living zone came into being yesterday. Some 580 hectares of bushland at the Bend of Islands on the Yarra River 35 kilometres from Melbourne were gazetted for "environmental living." The bushland, which has 60 human residents, a mob of grey kangaroos and a lot of smaller wildlife, will be kept in national park condition under the new zoning--but with people living in it. The new zoning, declared by the Planning Minister, Mr Walker, bans cats and dogs, plants foreign to the Yarra Valley, clearing of the bushland and subdivision into lots of less than 40 hectares. [Text] [Melbourne THE AGE in English 11 Oct 82 p 6]

AUTO EMISSION CONTROLS--The [Victorian] State Government yesterday introduced legislation to tighten EPA control of car emissions. The Environment (Air Pollution) Bill, introduced by the Minister for Conservation, Mr Walker, in the Upper House, seeks to make it an offence to manufacture, sell or use any vehicle which does not conform with prescribed emission standards; to use any vehicle not fitted with prescribed control equipment; and to sell or use a prohibited chemical substance. Mr Walker said tests had shown that

there was a need for a much stronger enforcement programme. "The results from the EPA testing station at Altona show that more than 30 percent of new vehicles fail to comply with the standards, and about 60 percent of in-service vehicles also fail," Mr Walker said. He said the EPA would enforce checks on motor vehicle dealers by requiring them to present two new vehicles a year on request. As well, if EPA officers noticed a car on the road which they suspected of exceeding the emission limits, for example, through a smoking exhaust pipe, it could be checked. [Text] [Melbourne THE AGE in English 14 Oct 82 p 20]

TOXIC-WASTE DISPOSAL PIAN--Melbourne--An American incinerator ship has been invited here to dispose of a highly dangerous toxic waste. The Conservation Minister, Mr Walker, said yesterday that there was as much as 10 years' supply of a dangerous waste in corroded barrels in local private stores. It would be relief to dispose of the poly-chlorinated bi-phenyls. The visit of the ship Vulcanus had not been officially confirmed yet but was expected to visit on November 22. Permission for the visit must come from the Federal Home Affairs and Environment Department. Mr Walker said that about 85,000 litres of PCB was being inadequately stored in Victoria. The ship would take the waste to sea and burn it. The Vulcanus was originally invited here by two companies, ICI and B.F. Goodrich, to dispose of stockpiles of hydrocarbon waste. But the Government believes that it will be a good opportunity to dispose of the PCB. Companies will be invited to dispose of their stockpiles. PCB is used mainly in industries that make or use transformers. [Text] [Perth THE WEST AUSTRALIAN in English 14 Oct 82 p 4]

SOIL CONSERVATION POLICY--Tax laws should be amended to provide for all soil-conservation work, according to a national group this week. The Australian Standing Committee on Soil Conservation is in Perth for its 46th meeting. The group will return to the city tomorrow after spending three days in country areas with soil problems. The Minister for Primary Industry, Mr Old, said that the committee had resolved to recommend to the Agricultural Council that the law be amended. "Current concessions appear to apply to actions on degraded or degrading land, but action on adjacent land to prevent erosion does not appear to be covered," he said. A committee report released this week has shown that there is a good chance of combating soil salinity. It identified the current extent of salinity and its likely development and recommended appropriate action. With the committee members are observers from Papua New Guinea and New Zealand. [Text] [Perth THE WEST AUSTRALIAN in English 14 Oct 82 p 36]

DROUGHT POLLUTION THREAT--The drought which has hit agricultural regions of NSW and Victoria is creating a serious and widespread water pollution threat. The Australian Standing Committee on Soil Conservation warned in Perth yesterday that the trouble will start as soon as the drought breaks. The committee expects eventual rainfall to seriously damage dried-up farms, sweeping thousands of hectares of fine topsoil into streams, rivers and catchment areas. Along with the topsoil will go accumulated chemical fertilisers and dung from stock. Country towns will be worst hit. Most

rural reservoirs do not have the filtering equipment that will be needed to clean the water. The result will be cloudy and possibly poor-tasting drinking water. Sydney and Melbourne will largely escape the effects of water pollution because of covered catchment areas and filter systems in their water distribution networks. But they are unlikely to escape all the effects of the drought. Speaking yesterday after the committee meeting, the chairman of the Victorian Soil Conservation Authority, Mr Alex Mitchell, said there was the risk of dust storms and "red rain" in both cities. [Text] [Canberra THE WEEKEND AUSTRALIAN in English 16-17 Oct 82 p 3]

EXPERTS APPOINTED TO REVIEW ENVIRONMENTAL LAWS

New Delhi PATRIOT in English 31 Oct 82 p 5

[Text]

The Government is appointing an experts cell to review the existing legislative measures for environmental protection and suggest effective measures for their enforcement reports UNL

Speaking to newsmen on the eve of the completion of two years of the Department of Environment Deputy Minister Digiviay Sinh said all State Governments had been advised to set up separate departments for environment protection and development.

Madhya Pradesh Uttar Pradesh. Karnataka Tamilnadu and West Bengal had already set up such departments and other States were expected to follow suit, he added.

Mr Singh said it was proposed to set up an institute for Himalayan ecology soon to study indepth the environmental protess of the Himalayan region. The institute would be located in one of the UP districts alling within the region.

He said various areas requiring fresh legislation have been identified. They are biosphere reserves, protection of grazing lands, protection of catchment areas, pre vention of overfishing in coastal waters and toxic substances control.

The consultancy services of the International Union of Conservation of Nature (IUCN) will be utilised for those areas like blosphere reserves where adequate legal expertise is not available in the country.

Mr Digvijay Singh said a pilot project would be set up in Dehra dun tehsil covering an area of 1,812 sq kms to demonstrate the feasibility of integrated eco development concepts. It will be under the joint auspices of the Department of Environment and the Uttar Pradesh Government.

The project will cover all important aspects like industry mining operation, waste disposal settlements planning and extensive afforestation.

GANDHI SPEAKS TO FORESTRY MINISTERS CONFERENCE

Madras THE HINDU in English 19 Oct 82 p 9

[Text] NEW DELHI, Oct. 18.

Forest Ministers from State Governments began their conference here today with a call by the Prime Minister, Mrs. Indira Gandhi, for a stotal change in the approach to forestry smanagement to arrest the depletion of forest re-sources and to save the country's endangered flora and fauna.

Mrs. Gandhi said if there was no change in the way forest resources were managed, the the Centre. Though she did not say it in so many words, she implied that this would be done if there was no visible improvement in the sforest cover under the present set-up.

The Prime Minister urged State Governments to ban the felling of trees, do away with the system of contractors for exploiting forest resources, concentrate more on regeneration and replantation and give greater attention to programmes of social and farm forestry.

Strong commitment: She regretted that though the importance of all these steps was realised there was wavering when it came to taking concrete decisions. She wanted a strong commitment on the part of all those involved in forest management to conserve resources.

Mrs. Gandhi agreed with the Agriculture Minister, Rao Birendra Singh, that the financial allocation for forestry was meagre. But she felt it could not be helped as the country's financial . position was strained. She hoped however, that the situation would improve soon.

In his welcome address, Rao Birendra Singh said the financial provision for forestry was only 0.7 per cent of the total Plan outlay. This was not enough. For instance, 15 lakh hectares would have to be planted every year to meet fuel and other needs. This would re-

quire Rs. 800 crores a year.

Not enough money; Against this, the allocation in both Central and the State sectors totalled Rs. 90 crores. The inadequacy of finance was a constraint on bringing up the forest cover to the level desired by the Prime Minister, he added.

Rao Birendra Singh regretted that despite repeated letters from the Prime Minister to State Chief Ministers to increase forest cover, the desired results had not been achieved. The State Governments seemed to feel that the Centre was interfering with the authority exercised by them over their property. Forests were national wealth, though technically they want to the State Course might be the property of the State Govern-

The Union Government was just trying to prevent the State Governments from slaying the goose that laid the golden eggs, he said. The State Governments, he said, received an annual revenue of Rs. 100 to Rs. 150 crores from forests. But they spent only Rs. 5 crores to As 6 crores on regeneration and new planta-The sale of the sale sale that the sale of the sale

COOPERATION WITH NEPAL IN HIMALAYAS URGED

New Delhi PATRIOT in English 15 Oct 82 p 4

[Text]

Chipko movement leader Sunderlal Bahuguna has suggested that a joint committee of members of the Planning Commissions of India and Nepal be set up to chalk out a 'Himalayan policy of development', reports UNI.

He said in a report that India is facing the same problems of forest conservation in its Himalavan region as Nepal. A joint committee could help launch a common programme.

Fiftysix-year old Bahuguna will being at Siliguri on 17 October the third and last phase of his 4,500 km foot march through the Himalayas from Kashmir to Kohima to create awareness among the masses about the need for forest protection.

The 3,020 kms he has walked so far included a 1269 stretchfrom Mahakai to Mechi in the Nepal Hamalayas.

Mr Habuguna wanted both
Nepal and India to chinge
the land use pattern of the hills.
He said priority should be given
to the plantation of trees for food,
such as chestnut and seasonal
furit trees, to meet people's basic
necessity. Next in priority should
be trees for production of fodder,
fuel, fertiliser and fibre.

The Chipko movement leader said deforestation in the hills had impoverished the once prosperous highlander, and led to scarcity of fodder, fuel and drinking water.

He was demanded that all hill forests be declared as protection forests and that felling of green trees for commercial purposes be banned.

Mr Bahuguna held a film slides show for a group of members of Parliament in New Delhi on Wednesday to demonstrate how the Himalayas are being denuded of forests.

cso: 5000/7007

BRIEFS

PORT POLLUTION OFFICERS--Bombay, October 14. An anti-pollution officer is to be appointed for each of the ten major ports in the country to ensure that the harbours are clean. To begin with, Bombay, Madras and Calcutta ports will have such an officer. The anti-pollution officer, of the rank of port pilot, will form part of the deputy conservator's department, Mr. K. K. Uppal, chairman of the Indian Port's Association, said today. Mr. Uppal is the chairman of the Bombay Port Trust. At present, there is no machinery for detection of pollution of the harbour waters and enforcement of anti-pollution measures. The penalty under the Merchant Shipping Act is also not deterrent, it being up to Rs. 2,000 fine on the master of the vessel flouting the rules. Many ships coming to Indian ports are known to let out the discharge into the sea after cleaning bilges. Foreign ports do not allow Meanwhile, the bill just passed by Parliament to amend the Merchant Shipping Act of 1958 provides for collection of a cess for creating oil reception facilities at the Indian ports and for obtaining equipment and materials for combating oil pollution at the ports. The cess will be at 50 paise per each ton of oil imported into or exported from India. The bill also raises the limitation of liability of the tanker-owner in our territorial waters. [Text] [Bombay THE TIMES OF INDIA in English 15 Oct 82 p 7]

FOREST ACREAGE LOSS--In 19 years from 1951, over four million hectares of Government forest land was reported to have been diverted to non-forest purposes, Prime Minister Indira Gandhi said in the Lok Sabha on Wednesday, reports PTI. However, since 1980, when the Forest (Conservation) Act came into force only about 6,000 hectares had been diverted to non-forest purposes, she told Mr R.P.Gaekwad and Mr Jitendra Prasad. Loss of forest cover had also taken place due to encroachments, illicit fellings, grazing, fire and other biotic factor, Mrs Gandhi added. An exact estimate of the losses for the whole country had however, not been made, she said, adding that several steps had been taken to preserve ecological balance. [Text] [New Delhi PATRIOT in English 21 Oct 82 p 5]

cso: 5000/7009

PROPOSED GEOTHERMAL POWER SITE HAS HIGH MERCURY LEVELS

Auckland THE NEW ZEALAND HERALD in English 16 Sep 82 p 1

[Excerpts]

Whangarei

Northland health officers fear the proposed geothermal power station at Ngawha could have a dangerous effect on people and the environment.

Tests show the geothermal area, near Kaikohe, has one of the highest levels of mercury and boron in the world.

Scientists and experts from the Ministry of Energy, the Ministry of Works and Development, Department of Scientific and Industrial Research and Health Department will meet in Wellington next week to discuss the impact of the power station.

A senior engineer of the electricity division of the Ministry of Energy, Mr Noel Hall, said the meeting was one of several being called in preparation of an environmental impact report on the energy proposal.

He said mercury and other chemicals in the Ngawha geothermal fluids were of the highest levels in the world.

The regional air pollution control officer for the Health Department, Mr Kevin Rolfe, said the mercury level at Ngawha would be 150 times greater than the Wairakei

field for producing the same amount of electricity.

He said the DSIR figures also estimated that the mercury level would be 100 times more than the Ohaaki field proposed for the Rotorua-Taupo area. The Ohaaki field is scheduled to be commissioned in 1987. Mr Rolfe said the figures were several years old and next week's meeting could produce new data.

The two 50 megawatt stations at Ngawha are scheduled to start commissioning in April 1990 and April 1991.

Mr Rolfe said he was confident that modern technology could get around the mercury problem.

Resolved

The Minister of Energy, Mr Birch, said that the existence of high mercury levels at the field was well known, and had been measured.

It was, he said, one of the many complex technical questions which had to be resolved before the field could be developed.

"The mercury level is really just another technical question which must be provided for.

"The plant will have to meet environmental and health standards. For instance, there is no way that you can discharge mercury into the air or waterways."

Mr Birch said the involvement of the Health Department in the project could not be avoided.

"The department has regulatory responsibilities which means that it must be involved in the way the plant is run."

The Minister of Health, Mr Malcolm, said there was no question the Ngawha field had a high mercury content, but that there was no health hazard now, merely a potential hazard.

The intention was to use the hot water to produce energy. What was important was to ensure that the development of the field did not produce a health hazard.

"There will only be a hazard if the technology used fails to take the presence of mercury into account, but there is nobody involved in the planning who is not aware of the high mercury content."

POLLUTION CONTROLS BOOST STEEL MILL EXPANSION COSTS

Wellington THE EVENING POST in English 7 Oct 82 p 4

[Text] AUCKLAND, Today (PA). - New Zealand Steel says it will have to spend more than \$100 million on environmental protection for stage one of its Glenbrook mill expansion.

> This represents 17 percent of the \$616 million cost of the new iron and steel-making facilities.

> On today's prices, environmental protection would cost \$97.5 million and the new plant and buildings \$572 million.

> By May 1984 when stage one is complete, escalating costs will increase the price tag to \$105 million for environmental protection and. \$616 million for the new

plant.

Equipment for air pollution control is expected to be the most expensive item. The Health Department has given the company until March to upgrade pollution control from its multihearth furnace, and the cost of this has been included in the environmental budget for stage one.

The senior development engineer for the New Zealand Development Co, Mr Steve Reindler, said environmental measures included a

gas-cleaning system, water treatment and sewage disposal.

Noise and air pollution control equipment would be

installed, and the water intake pipe on the Waikato River would be specially designed to protect fish life.

The cost also covered engineering designs and the compiling of the environmental impact report covering the mill expansion, her

The stage one expansion of the mill will boost production by about 600,000 tonnes of slab steel a year. Stage two will involve the building of hot and cold roll-ing mills to roll slab steel into coil products.
In March 1981 the total

cost of the expansion was estimated at \$830 million, but allowing for inflation this is equivalent to \$1075 million at today's prices.

5000/9081 CSO:

BRIEFS

ECOLOGICAL MAPS--Wellington (Press Assn)--A Government mapping project has been completed and will help planners to avoid the "serious blunders of the past," the Minister of Science, Technology and the Environment, Dr Shearer, said yesterday. Maps have been prepared by the Department of Scientific and Industrial Research dividing the country into 82 natural ecological regions, identifying them according to their dominant features--forests, plant life, soil types, climate or geological structures. Dr Shearer said the maps would "help national and local planners to avoid the serious blunders of the past caused by attempts to apply the land use practices developed in one district to the different conditions of another." They are "designed to promote land and water uses that protect the natural diversity of our landscape, and its flora and fauna." "The subdivision of New Zealand into natural regions will make it easier for us to establish an inventory of the country's landscapes, plant and animal life, as a basis for a system of protected areas," Dr Shearer said. [Text] [Auckland THE NEW ZEALAND HERALD in English 17 Sep 82 p 9]

MARINE PARK—A marine park at Mimiwhangata, halfway between Whangarei Heads and the Bay of Islands, would offer the public "a unique recreational experience" while protecting the environment. This is one conclusion of an environmental impact report on the proposed marine park, prepared by the Department of Lands and Survey for the Hauraki Gulf Maritime Park Board. While Mimiwhangata's marine resources are not unique, it says, they are among the most valuable on the eastern Northland coast. "It is imperative that the environment remains without deterioration," says the report. "The proposed marine park is an attempt to provide balanced management (allowing for both recreation and conservation)." The park board's plan is to establish an area stretching 1000 metres out to sea as a park by phasing out commercial fishing and restricting recreational fishing and shell-fish collecting. The Commission for the Environment will prepare an audit of the report. [Excerpts] [Auckland THE NEW ZEALAND HERALD in English 17 Sep 82 p 3]

THREE TOP POLLUTERS OF RIVERS LISTED

Cebu City VISAYAN HERALD in English 7 Oct 82 p 5

[Text] Manila--(DEPTHnews)--The mining, chemical and paper industries are the three top polluters of rivers in the country.

The National Pollution Control Commission pinpointed the top sources of water pollution through the inspection of 4,059 industrial establishments nationwide.

In a briefing paper for the Safety Organization of the Philippines Inc., NPCC Commissioner Pechache pinpointed the top sources of water pollution through the inspection of 4,059 industrial establishments nationwide.

In a briefing paper for the Safety Organization of the Philippines, Inc., NPCC Commissioner Pechache reported that of the firms inspected, 1,672 were found air-pollutive; 1227 water pollutive; pollution control devices; and 505 without water treatment plants. [as published]

The NPCC inspection sought to determine how far industries have gone in installing pollution control facilities. An anti-pollution law gave these industries until 1987 to come up with such protective devices.

In the case of the mining industry, the Commission found that the 24 mines active as of the 1981 last quarter were disgorging from 100,000 to 144,000 metric tons of tailings daily. The tailings or refuse from the mines are usually dumped into rivers, creeks and coastal waters.

As a result of this dumping NPCC said nine rivers in Luzon have become polluted, three in the Visayas, and one each in Palawan and Marinduque.

The tailings also cause damage to agricultural fields. NPCC said owners of damaged farm lots have sued for damages with some of the mines made to pay. Other damage suits await court decision.

INSTITUTE OF COUNTRY ECOLOGY DESCRIBED

Prague TVORBA in Czech No 37, 15 Sep 82 p 14

[Interview with Doctor of Natural Sciences Jaromir Pospisil, Candidate for Doctor of Sciences, Director of the CSAV [Czechoslav Academy of Sciences] Institute of Country Ecology in Pruhonicen near Prague, by Lubomir Sedlak; date and place not specified]

[Text] [Question] Comrade Director, why an Institute of Country Ecology? Are not cities also environments for people?

[Answer] Five years ago, when our institute was created, there actually were arguments concerning its name. Recently we had visitors from Algeria and they did not quite understand the term "paysage," which I used in translating the word "krajina" into French. The word "country," you see, connotes to most people, thanks to poets and other artists, nature. However, we as ecologists define the word much more broadly, dividing it, for instance, into natural regions and urban regions. Recently in Ostrava the CSAV also created an Institute of Industrial Regions. It is true that we are not as yet conducting much research in cities, but we spend a good deal of time on the relations between cities and open spaces, which is the name we give to nature (we include neither villages nor vacation-home settlements in our definition). This is because outdoor recreational activity has, in my opinion, the same influence on a region as industry and agriculture. One only has to look at the Lipen dam during the summer season.

[Question] How many people work at your institute?

[Answer] There are 42 candidates and doctors of science. When you add to this the other "primary" employees, the foreign students and graduate students and the administrative personnel, of which we have, by the way, very few, it amounts to a little over 130 people. In CSAV institutes as a rule one-third of the employees have advanced degrees, another third "only" a college education, and the remaining third high school.

[Question] Are your employees primarily biologists?

[Answer] Biologists and chemists. But we also have economists, geographers, graduates of agricultural and forestry colleges, two sociologists and even a philosopher; the basis of our work, however, is in the natural sciences.

[Question] Isn't two sociologists too few? I sometimes have the feeling that the environment in our country is understood as strictly a natural scientific and technical matter...

[Answer] Don't forget that the CSAV has environmental divisions in the Institute of Philosophy and Sociology, in the Economics Institute, and in the Institute of the State and Law.

[Question] What is the main difference between your institute and the CSAV Institute of Botany, which is also based in Pruhonice?

[Answer] The Institute of Botany studies the "green covering" of the Earth, including ecological relationships, but only those of this vegetation. We do not study flora and fauna as an "independent entity." This is the purpose of the Brno Institute for Vertebrate Research, the Prague Entomological Institute, and other scientific institutions. We are not interested in the rarity of the jason, a type of butterfly, but in whether it occurs in a particular ecosystem that we are studying. Should it disappear this means that something has changed in this ecosystem. For us, biological species are a type of indicator, litmus paper to aid us in determining the condition of the environment in a particular area. And we know that certain species are very sensitive to pollution. Lichens, for instance, grow basically at altitudes of over 500 meters, and no lower, because the air at lower elevations is of poor quality. We are interested, then, above all in how animals, plants, insects, mushrooms, etc. are organized in a specific ecological system and also in their relationship to man.

[Question] How do you cooperate with the CSAV Institute of Geography?

[Answer] It can be said that we begin where the geographers stop. They map the terrain for us, and we look for the causes of certain situations on this terrain and for ways to change them.

[Question] Do your employees use the Pruhonice park for scientific work?

[Answer] For certain experiments, but not very often. Don't forget that parks are only one, albeit very specific, regional feature.

[Question] Doesn't it appear a little ironic to you that it was right in Pruhonice, the home of the Institute of Regional Ecology, that there was an ecological accident not long ago (which was written up in RUDE PRAVO), specifically, a leak of crude oil?

[Answer] It will probably surprise you that ecological accidents are something quite natural in the life of our planet. An ecosystem left undisturbed by man can survive quite a lot, for instance a volcanic eruption, and renew itself over time. In Czechoslovakia, because we are an advanced industrial country,

ecological relationships are pretty strained. Previously, when diesel fuel would leak into the Sazava, there was on the whole nothing to be concerned about. Today this would threaten one-quarter of the water supply for Prague.

[Question] What is the condition of the environment near where you live?

[Answer] I live in the Zahradni Mesto section of Prague. It sounds poetic, but today this is an area primarily of apartment buildings, and not far away the Mitas rubber mill poisons the air. I live, however, in a smaller house with a park nearby, so I have even been able to take home some shrubs and trees from the institute.

[Question] Do you get out of town a lot?

[Answer] Whenever I can. I do not, you see, own either a cottage or a hut, but am content with a house trailer for my car, and to travel with my wife, children and dog.

[Question] I saw you last year at a press conference on the long-distance study of the Earth with the aid of satellites. Was this an accident?

[Answer] This research is very important for ecologists because it is capable of covering huge areas; it makes possible a view of the crown of a tree from above and, as is well known, it is the tops of trees that suffer the most from industrial emissions—it is here that their impact is noticed first. Moreover, from long-distance research we obtain information on an entire territory in a few hours. The volume of data may only be processed by a computer, which we are to receive in 2 years. For the time being, we are taking advantage of cooperation with other institutes, for instance the Institute of Information and Automation Theory, which is directed by Academician Kozesnik, former CSAV president.

[Question] What are you doing to make the people of the CSSR aware of the importance of ecology?

[Answer] A while ago, for instance, I did a program for television which was titled "Environment for Life." I am also the chairman of the editorial council of the monthly magazine OUR NATURE. Not long ago I published an article there entitled "Does Nature Make Exceptions?," in which I concluded that exceptions, for instance, the release of waste water into a river, are condoned only between one person and another, and that "mother" nature asks no one. This article was the initial one of an entire series in the magazine on this subject. Subsequent articles will be contributed by an economists, a lawyer and other experts.

[Question] Nevertheless, doesn't it appear to you that man is somewhat in the background in this magazine (even in its title)?

[Answer] I guess you are right. You know, the relationship between man and nature is far more complex than nature itself.

[Question] Does an ecological map of Czechoslovakia exist?

[Answer] It is my view that such a map would be impossible to put together. The condition of the environment consists of immense amounts of data, all of which would not fit on a map. Certain specific maps, however, have been drawn, for instance of vegetation, bird nesting patterns, air pollution, etc. I think that it would also be possible to put together a map of the "ecological resistance" of regions.

[Question] Shouldn't a Ministry of the Environment be established in our country?

[Answer] It is possible that one should, though countries have solved this problem in various ways. In the Soviet Union, they have the State Committee for Environmental Protection, as well as the so-called Biosphere Council attached to the Academy of Sciences. When, for instance, this council met in the Moldavian capital of Kisinev, both the first secretary of the CPSU and the chairman of the council of ministers of this Soviet republic participated and signed the final document.

[Question] Do you think that environmental protection is taken more seriously in the Soviet Union than here?

[Answer] Certainly, even though this is conditioned by a few "objective" causes. The USSR and Mongolia are, for instance, the only socialist countries where all of the land, even the kholhoz land, is owned by the state. I would cite Lake Baikal as an example. No one from industry was even consulted there until scrubbers had been installed. There was no question of the attitude "Well then, choose, either the environment or production" such as occurs in Czechoslovakia, where certain "captains" of industry literally force the politicians to the wall. Recently one of our scientists returned from Baikal and told us how they had offered him a glass of waste water from one of the factories on the shore of the lake! It was completely transparent and tasted like mineral water, because there was a lot of salt in it.

[Question] Is the environment worsening in our country in the countryside as well?

[Answer] I would even say that currently the countryside is just as bad off as the city, and even worse off in some respects. In the villages, in contrast to Prague, there are not, for instance, water works with inspected water. Recently I was visiting a friend in Zelezne Hory, and not a single well there had been approved as 100 percent safe hygienically. On the other hand, in the cities there are more stresses of a psychic nature, for instance when mass transportation does not function...On the whole, however, the environment of the countryside will always be better for the simple reason that there is less of everything there.

[Question] Are you aware that certain of our agricultural products are having problems on foreign markets because they are "overchemicalized?"

[Answer] You have brought up a very complex problem. Chemicalization cannot be responsible for everything, however. I think that mainly we should implement the slogan here that "less is sometimes more." Man as a biological species is not dependent on how much, let us say, coal he produces, since this represents only one aspect of his standard of living, but on the kind of air, water, etc, that he has. The environment is an inseparable component of the standard of living, as we are fond of saying, but what position in this standard will it occupy? It is my opinion that it is the foundation on which the other components must develop. What good will cars be to us if we have nowhere to go? Today, every third family in the CSSR has a car, and this is, shall we say, a manifestation of a certain standard of living. But certainly everyone requires potable water; and we cannot say that "in our country every third family has access to potable water."

[Question] But, for instance, in India this is the case...

[Answer] However, one cannot speak about some kind of standard of living in relation to the starving people of the developing countries. Clean water and air are a manifestation of a necessity of life or, if you will, a minimum for life.

[Question] In what ways is your institute cooperating with the other socialist states, especially the neighboring ones. I have in mind, for instance, the influence of emissions from the GDR and the People's Republic of Poland on the Jizerske Hory and, gradually, on the Krkonose as well?

[Answer] This situation is being handled by state organs.

[Question] Which of the world's ecological problems seems to you to be the most serious—the cutting down of the tropical forests, the so-called green-house effect, the chemicalization of agriculture, the shortage of potable water, or increasing urbanization?

[Answer] None of these, even though all of them are of course pressing. The main obstacle to greater environmental quality is what can be called the "exploitative approach" of man. As early as the last century Engels wrote, I think in "The Dialectic of Nature," that "nature cannot be conquered as a conqueror subjugates a foreign people; we must realize that we are a part of it." Moreover, environmental problems must be solved systematically, they cannot be approached on a day by day basis. Isn't it better to put baskets on a street full of trash than to clean the street every day? Sometimes, however, I admit that not even these baskets help, but this is a problem for the psychologists, not the ecologists.

[Question] It is sometimes said that the national economy and the environment do not dovetail completely. Northern Bohemia is cited as a typical example. What do you think, are economics and ecology mutually exclusive?

[Answer] Don't forget that in many respects we were forced to start on the basis of what capitalism left us here. Moreover, socialism is only, as is well known, a transitory stage in the history of humanity, including the not completely ideal environment. For the time being we must mine brown coal in North Bohemia, and the worsening environmental effects can only be moderated, for instance with separators. For this reason, it made me even more angry when, for instance, these separators were turned off at night at the Komorany electric power plant, as I read not long ago in TVORBA. Such actions can be called nothing else than criminal and should be punished as such. Very positive results are being achieved in the northwestern areas of our republic in recultivation. If you could see how the areas around mine shafts look in Sweden or in Finland, countries which are often held up as examples of environmental protection—they are devastated areas with which nothing can be done. It is not surprising then that their experts take excursions to the Podkrusnohory area.

[Question] And what about the time when all the brown coal will be mined?

[Answer] At that point, hopefully, we will be getting most of our energy from nuclear power plants. These do not completely resolve the situation, to be sure, but they make possible an approach to another method for obtaining energy, for instance, from plasma. Nuclear power plants, moreover, represent an enormous investment, which small countries cannot afford. The solution to this problem is cooperation. I think that there will gradually cease to be borders between the economies of states (in the environment there are none even today—take a look at the air), and gradually there will disappear what could be called the individualism of nations. The victory of socialism throughout the world is an economic inevitability, just as feudalism became untenable once manufacturing began to develop.

9276

DEVELOPMENT OF ENVIRONMENTAL POLLUTION OUTLINED

Environmental Situation Report

Warsaw GAZ, WODA I TECHNIKA SANITARNA in Polish No 7, Jul 82 pp 99-100

/Text/ In the first half of 1982, the National Council of Environmental Protection issued a report discussing the causes of environmental degradation in Poland. The water in Poland is especially badly polluted. During the harvest and processing of sugar beets, 33 percent of all of the rivers are polluted above the permitted standards. Taking into consideration other hydrological data (years prior were not taken into consideration), the percentage of polluted rivers is now 49.4. Theoretically, 50 percent of the country's rivers cannot be used for economic purposes. Relatively clean water in Classes I and II is only 41.4 percent. Surface water is becoming less and less safe to drink. At present, approximately 50 percent of the surface water used by municipal water supply systems does not meet standards or threatens emergency pollution. The greatest threat to water quality on the Baltic coast is untreated sewage that flows directly into the sea near beaches and resorts. Many resorts have been closed in Puck Bay, Gdansk Bay and Vistula

National air pollution emissions for individual pollutants are as follows: factories, 60-70 percent; residential-community boiler plants and individual home boilers, 15-20 percent and cars, 10-15 percent. In 1975, the amount of particulate pollution emitted into the atmosphere was 2.2 million tons, while in 1980 it increased by 500 tons or 0.5 percent. Emissions of gaseous pollutants in 1975 were 33-00 million tons (sulfur dioxide (SO₂) at 2.1 million tons) and in 1980, 5.1 million tons (SO₂ at 2.8 million tons), which means an increase of 69 percent (32 percent for SO₂).

In 1980, only 11 percent of the factories emitting harmful gaseous pollutants had installed air pollution control devices. As a result of considerable concentration of SO_2 in the atmosphere, an average of 8 tons of sulfur compounds falls on 1 km² of land, which means that in 10 percent of the country there are levels exceeding 50 tons/km² per year.

Other basic elements polluting the environment are noise and vibration—side effects of human activity—that are harmful to one's health and reduce one's productivity. In 1972, deafness moved into first place among occupational diseases and constituted 32 percent of all cases of declining work ability. Vibration disease constituted 18 percent and occupied third place.

The most common and at the same time harmful noises come from car/truck, train and plane routes, as well as from communications installations and a significant number of factories. The greatest harm (in the opinion of 80 percent of those living in the cities) comes from noises attributed to car and truck traffic, street cars and trains. During the rush hours, street noise exceeds the allowable level of 65 dBA. Small towns have 10-25 percent of their streets in this category, medium-sized cities 20-45 percent and large cities 40-80 percent.

The production area in Poland continues to become smaller and soil quality deteriorates. These tendencies are very threatening because they have repercussions on food production. Between 16-18,000 hectares of land are taken annually for new factories, highways, cities, apartment complexes etc. Soil degradation also occurs. Between 75-85,000 hectares are dried out mainly by mining. This is caused by exceptional water drainage in agriculture and forestry: over 1 million hectares (82 percent) of peatbog have gone into economic use. If we continue current land reclamation policies to 2000, natural peathog will disappear from the Polish landscape. Mineral mining, especially through use of strip-mining, threatens land and soil. The area of soil degration caused by prospecting, drilling, mining and other industrial activities stood at 108.8 thousand hectares. A plan in 1976-80 called for 2,575 hectares to be recultivated, although only 1,455 hectares (56.5 percent) were reclaimed.

As regards the threatened state of plant life, it should be noted that among 2,300 species of seed plants and polypody, 50-60 percent have significantly reduced their area of productivity, and approximately 400 types are seriously threatened in the entire country. During the postwar period, the country's woodlands increased from 22.2 percent in 1950 to 24.6 percent in 1960. During the last 10 years, however, there has been a declining tendency in woodlands growth-27.3 percent in 1975 and 27.6 percent in 1980 (Europe's woodlands stand at 31.8 percent).

Wild animal populations are under the considerable influence of anthropogenic factors, which cause a far-reaching threat to the species. It is estimated that we have at present 41 disappearing species (almost 10 percent of the country's fauna), and 66 percent are seriously threatened.

A serious problem is the threat of radiation to people and the environment. The largest radiation dosage to people in Poland comes from natural sources. This dosage comes to around 180 millirems annually and it is composed of cosmic radiation and radiation from natural radionuclides contained in rocks, soil, home walls, water, air, plants, animals and human tissue.

The threat to health and the contamination of food, feed and articles of consumption exists in surface water (detergents and laundry materials) and eatable plants (lead, zinc and cadmium). Particularly harmful to human health are nitrites and nitrates, nitrosoamines, lead, cadmium, mercury, arsenic, fluorine and pesticides and antibiotics.

The Katowice voivodship, where particulate emissions are 30 percent and gaseous emissions 40 percent of national emissions, is particularly threatening to the environment. In a small area is also 60 percent of all national waste. The amount of residential and industrial sewage is approximately 22 percent of the national amount (during a 24-hour period there are 2,544,133 m³ of sewage produced). Recultivation activity in the voivodship should be critically evaluated, as there was 54 percent less in 1980 than in 1975. During the years 1976-80, 4,200 hectares were recultivated, but only 3,000 hectares were genuinely reclaimed.

The greatest threat to the environment in Krakow and the surrounding area is air pollution. There are high concentrations of SO_2 in the voivodship. During the years 1971-78, permanent violations of permissible standards were evident for fluorine gas, which ranged from 0.03 to 0.51 mg/m³.

For the Gdansk Bay, the most threatening are residential, industrial and agricultural sewage; burning and its byproducts and biogenic products carried by rivers. The greatest oxygen shortage is in the Gdansk Basin. During the years 1900-75, the average annual decline of oxygen concentrations per 100 meters was 0.26 mg/l, and after 1975 it was 0.53 mg/l.

Air pollution emissions from industrial sources in Legnica voivodship are approximately 38,200 tons of particulates and 500,900 tons/year of gases (154,900 tons of SO₂). The degree of air pollution in Legnica voivodship is tied closely with the mining and smelting of copper there. Basic pollutants include sulfur dioxide, sulfuric acid, carbon bisulphate, hydrogen sulphide, copper compounds, lead and cadmium.

Air pollution measurements show the great harm to the environment from activities at the "Police" Chemical Works. As a result of current production there, concentrations of fluoride compounds, sulfuric acid and ammonia compounds exceed allowable limits by several times.

Particulate and gaseous emissions threaten Babiagora National Park, Ojcow National Park (from factories in the Krakow region and Silesia) and Kampinos National Park (from the Warsaw Works and the Chodakow Textile Works).

Also threatened are extremely valuable natural areas besides the national parks: the Biebrzak Marshes polluted by the introduction of untreated sewage to the environment, to which even treated sewage is unsafe; the Masurian Lakes polluted by industrial, residential and agricultural sewage; the Leczyca-Wlodawa Lake Area and the Western Polesie Forests polluted by the Lublin Coal Area; the Vigry Lake polluted by industrial and residential sewage; the Suwalki Scenic Park degraded by ore mining and the Gostyn-Wloclawek Scenic Park destroyed by industrial emissions in Plock and Wloclawek.

Resort areas, like national parks, are included among specially protected areas, although regulations are not respected. Every Polish resort area suffers from excessive air pollution concentrations, of which the worst situation is in the health resorts in the Sudeten Mountains (the average annual particulate fallout is 140 t/km^2 — 40 t/km^2 is allowed). Violations

of allowable SO₂ concentrations are 30 percent more frequent there than in any other Polish resort area. Nitric oxide and carbon monoxide concentrations are also significantly higher. In Cieplice Zdroj, Duszniki, Polanica and Szczawno, fluoride concentrations are also in violation of standards. The Sudeten health resorts have inadequate sewage disposal and a high degree of water pollution. The wasteful management of underground waters had led to threats to mineral sources (e.g., Ladek Zdroj).

Besides the pollutant emissions eminating from neighboring industrial regions (Walbrzych, Jelenia Gora, Legnica-Glogow Copper Area), also degrading the health resort areas are industrial sites located in the area, the residential economy (coal-fired heating and the lack of sewage treatment plants) and adjacent farms. In addition to the Sudeten health resorts are Swinoujscie, Kolobrzeg, Inowroclaw, Ciechocinek, Wieniec, Naleczow, Konstancin, Wieliczka, Swoszowice (fluoride), Rabka and Ustron. Without improvement to air and water quality in the resort areas, it is difficult to speculate on their chances of use and survival.

Air Pollution Situation

Warsaw RZECZPOSPOLITA in Polish 13 Aug 82 p 4

/Tex \overline{t} /There are 1,066 factories in the country that are especially harmful to air quality. Among this group, there are 144 that do not have any dust extracting equipment, while only 10 percent have equipment to reduce gaseous emissions.

Only 352 have air pollution control devices, although only 73 are really well equipped. Among the factories not having any control equipment are the Mazowieckie Refinery and Petrochemical Works in Plock, the Chemical Works in Police and the Nitrogen Works in Wloclawek. The greatest amount of particulate and gaseous emissions occurs in Katowice Voivodship (32 percent of all emissions), Krakow (13 percent), Legnica (7 percent) and Jelenia Gora (5 percent).

From the perspective of air pollution, one can cite five areas in the country that are particularly threatened. These are the Upper Silesian Industrial Area, Krakow region, Legnica-Glogow Copper Area, Jelenia Gora Valley and areas near Walbrzych and Police. A characteristic common to these areas, besides the constant violations of allowable sulfur oxides concentrations, is the high level of toxic substances; e.g., fluoride (Katowice, Police and Legnica), carbon disulphide (Jelenia Gora) and heavy metals, especially lead (Katowice, Walbrzych, Legnica-Glogow).

Moreover, there are areas where harmful substances in the air do not violate standards, but because of certain atmospheric conditions, results characteristic of ecologically contaminated areas also can appear. Examples of these areas include Konin (Aluminum Smelter), Plock (Mazowieckie Refinery and Petrochemical Works), Oswiecim (Chemical Works), Tomaszow Mazowiecki (Chemitex Wistom) and Wloclawek (Cellulose Paper Works and Nitrogen Works).

9807

BRIEFS

KRUGER ANIMALS DYING--Drought conditions are reaching dangerous proportions in the Kruger National Park and large numbers of animals are dying. A spokesman, Dr P. van der Walt, said that there was no drinking water shortage because a water programme was introduced when the drought began. But he added that there was a lack of irrigation water in the park. "When we had a drought in the 1960s we wanted to introduce water catchments, but this has not been done." Dr van der Walt said that most of the catchments in the area were outside the park and that the water was used for agricultural purposes. He added that it was expected that only 40 percent of the grass and foliage that was normally available could be used and that was why the animals were suffering. 'There is a likelihood that there will be no rain until January." The area that has been worst hit is around the Shingwedzi River because there has been virtually no rain in the area this year. Dr van der Walt added that the Sabie River was the lowest it had been for the last 30 years. According to him the animals were dying so quickly that the scavengers were not eating the carcasses. He said that it was good in a way, because normally the scavengers preyed on the buck and now they only ate the dead carcasses. Dr van der Walt added that the drought was just another phase in the ecological cycle and that it was a natural way of culling the animals. "In the summer months there is a lot of breeding and this will prevent overpopulation." He added that conservationists did not like this particular phase, but they always tried to prepare for phenomena such as these. [Text] [Johannesburg THE CITIZEN in English 11 Nov 82 p 9]

BUSH ENCROACHMENT--Bush encroachment threatens some 37-million hectares of South Africa's Bushveld areas, according to the Department of Environmental Affairs and Fisheries. The Department viewed the matter in such a serious light that it had decided to regard bush encroachment control as a soil conservation measure, the Director of the Division of Soil Protection, Mr Pikkie Baard, said in a statement in Pretoria yesterday. "Bush encroachment has assumed such serious proportions in some Bushveld areas of South Africa that it not only seriously hampers production from one of our greatest natural assets--the veld--but it also thwarts traditional veld improvement methods." Mr Baard announced a subsidy scheme for the control of bush encroachment in the Northern Cape districts of Kuruman, Postmastburg and Vryburg. A similar scheme would come into effect in the other Bushveld areas of the Transvaal, Natal and the rest of the Cape Province later, Mr Baard added.--Sapa [Text] [Johannesburg THE CITIZEN in English 10 Nov 82 p 17]

PESTICIDES IN FOOD--The Minister of Agriculture, Mr Greyling Wentzel, has been muzzled by his own Department because bureaucrats believed he was damaging South African food exports. The officials ripped out a page from a departmental information sheet--Agricultural News--which reported the new Minister on the subject of pesticides. Mr Wentzel had said in Heilbron in the Free State last week that South Africa was one of the few countries in the world where the incidence of pesticide residues in food was a serious problem. Although the speech was widely reported in the Rand Daily Mail and other major newspapers, officials, it seems, took fright -- the Minister had made "too strong a statement" on the issue because he had misinterpreted the information. So a page three report in the latest edition of Agricultural News was ripped out of every copy and an introductory sentence on page one referring to the censored report was deleted with felt-tipped pens by civil servants. A senior Agriculture official said yesterday, "I want to be honest with the Press." The official, who asked not to be named, said information officers tore out the page on orders "from up top" because senior civil servants believed that Minister Wentzel's statement was "a little too strong" and could be damaging to South Africa's food exports.. He said the Minister's speech was intended to warn farmers to use insecticides with more care but senior officials felt the Minister misinterpreted the situation and made "too strong a statement" on the issue. Niekert, Director of Agricultural Information, denied the information presented to him by the Mail. He said the page had been removed because a mistake appeared on it, and officials were not prepared to hold back the publication. The fact that Mr Wentzel's speech appeared on the same page was purely coincidental. "There is nothing sinister about the whole thing," Dr Van Niekerk said. [Text] [Johannesburg RAND DAILY MAIL in English 26 Oct 82 p 1]

cso: 5000/39

PROPOSED BAN ON ASBESTOS WOULD HARM ECONOMY

Harare THE HERALD in English 29 Oct 82 p 6

[Text]

SWEDEN has banned cause has grown in this asbestos except under strictly controlled conditions. Denmark is banning asbestos. quickly phasing it out and vociferous lobbies in Britain and the United States are. pressing to have it banned

One of America's biggest asbestos producers, Manville Corporation, recently filed for bank-ruptcy — not because of bad financial management but because of the thousands of law suits that had been filed against it by disabled workers who had been exposed to asbestos.

In Zimbabwe, asbestos continues to be a major export: Production and sales have dropped dropped recently, largely because of the world recession, although concern about the health hazards attached to asbestos has also played a role. Asbestos earned Zimbabwe \$76 million in foreign exchange last year, but production fell by 11 percent during the first six months of this year and African Associated Mines, the largest producer, believes that its production for the whole of 1982 will drop by about 12 percent.
While awareness of the

dangers of exposure to asbestos dust and the debilitating diseases it can

country, miners and manufacturers do not believe the answer lies in

The product is not only far too important to this country's economy, but no substitutes have yet been found that have the same all-round applicability without having their own hazardous drawbacks.

Instead, experts believe asbestos will continue to be widely used, but under stricter control to protect the health of workers and the public at large.

UNFORTUNATE

Čde Christopher Ushewokunze, Secretary for Mines, said any ban on asbestos, would be "un-fortunate" for Zimbabwe as a developing nation.
The repercussions would be too great — "loss of employment, loss of foreign currency resulting in the general de-terioration of the coun-try's economy".

"However, we do not believe asbestos will be banned, but controls over its use, even over the methods of mining and processing, will be increased. This we welcome because we believe the proper use of chrysotile (white) asbestos does not constitute a health risk.'

The properties that make asbestos almost irreplaceable include non-flammability, flexing and tensile strength, head and electrical insulating ability and resistance to acids and alkalis.

There are six basic types of asbestos, the most common being chrysotile (white asbestos) and crocidolite (blue asbestos). Of these, blue as-bestos of the type mined in South Africa is regarded as the most hazardous. Zimbabwe only has deposits of white asbestos.

Asbestos is hazardous when its fibres are released into the air and breathed in by humans.

It has been accepted strice the early 1920s that exposure to asbestos fibres causes asbestosis, a progressive, disabling and incurable lung disease. Since then, it has been established that asbestos is known to have caused mesothelioma, a malig-nant tumour with a latent period of between 20 and 40 years, and experts are studying the possibility that white asbestos may cause other types of cancer.

100 CASES

In Zimbabwe, the Workmen's Compensation Insurance Fund has about 100 cases of asbestosis on its books but no mesothelioma cases. This is not an accurate reflection of the incidence of asbestos related diseases in this country because the cases only come from the mining sector and there could be many more in the industrial sector.

Cde Ushewokunze ad-mitted that research "in this country and indeed in any other developing country...into the discusses attributed to asbestos exposure has been very limited". But, he pointed out, he had not come across conclusive asbestos' evidence of health hazards, especially as it relates to the chrysotile asbestos which we mine".

STUDIES -

A British study published in 1979 found that exposure to chrysotile alone rarely mesothelioma, but failed a safety low which identify threshold below there is no evidence of adverse effects from asbestos exposure.

The 1969 study published in Zimbabwe (by Professor Michael Gelfand and Professor S. Ar-chibald Morton) found that out of over \$000 workers examined, 39 were found to have asbestosis. This represented

about 0.5 percent of the total workforce.
The study also found that between 1955 and 1959, eight people had lung cancer in the lung Zvishavane and Mashava mining areas and between 1960 and 1965, five people had lung cancer. The team said it suspected that "exposure to chrystotile may have some causal relation to the development of lung malignancy".

In response to growing concern about the health hazards of asbestos, the British government in 1969 imposed tight controls on fibre levels in asbestos factories. Regula-

tions about protective clothing were also intro-duced. The British Health and Safety Commission will introduce even tighter controls in January next

In Zimbabwe, although there is legislation limit-ting dust levels in all mines, there is no aspectos fibre count limit, but the major companies in the industry have, because of their British links and

CSO: 5000/33

BRIEFS

MIDLANDS DROUGHT--Gweru. Many cattle are dying in the Midlands because of the drought and the recent cold spell, the Midlands Drought Relief Committee heard at one of its regular meetings in Gweru yesterday. A total of 445 cattle deaths were reported in the Mberengwa district last month, while in the Gweru district an average of four a day were dying, the meeting was told. In the Gokwe district there were 27 reported deaths, most of them attributed to the drought and cattle eating poisonous plants, while in the Mvuma district some were dying after being stuck in mud. It was agreed by the committee that the actual figures were probably higher because some deaths had not been reported. It was also reported at the meeting that throughout the province the condition of cattle was poor except in the Kwekwe district where it was described as being "generally good". In Gokwe the conditions were described as "variable". In spite of the recent rains, the meeting heard that grazing in the whole of the Midlands province was still very poor and cattle were reported to be eating tree leaves and hut thatch in the Mvuma district.--Ziana. [Text] [Harare THE HERALD in English 28 Oct 82 p 11]

CSO: 5000/33

DECREE ON PROTECTION OF ATMOSPHERE PROMULGATED

Moscow VEDOMOSTI VERKHOVNOGO SOVETA ROSSIYSKOY SOVETSKOY FEDERATIVNOY SOTSIAL-ISTICHESKOY RESPUBLIKI in Russian No 29, 22 Jul 82 pp 629 - 645

[Law No 1027 of the RSFSR Supreme Soviet Presidium on Protecting the Atmosphere and Decree No 1028 on the Procedure for Implementing the RSFSR Law "On Protecting the Atmosphere"]

[Text] Law of the Russian Soviet Federated Socialist Republic on Protecting the Atmosphere.

The atmosphere is one of the primary vitally important elements of the environment.

The scientific technical revolution which is affecting all aspects of society's life, the high rates of industrial development, the growth of cities, the expanding use of the atmosphere, and the increased scales of man's effect on the environment require increased attention toward the protection of the atmosphere.

The soviet state attaches a great deal of importance to the maintenance of the atmosphere's favorable conditions, its renewal and improvement in order to secure the best living conditions for the Soviet people — their work, life, rest, and health protection — and the further development of material production and culture.

The Constitution of the USSR and the Constitution of the RSFSR provide for the necessary measures to be taken to preserve the atmosphere in a clean condition for the sake of the present and future generations of the USSR which the Russian Soviet Federated Socialist Republic has joined on the basis of voluntary union and equality with the other union republics. The Soviet state is carrying out a series of scientifically sound technical, economic, social, and other measures which are aimed at preventing and eliminating pollution of the atmosphere and other harmful effects on it. And it is also engaged in international cooperation in this area.

Soviet laws have been called upon to actively contribute to the protection of the atmosphere.

Section 1. General Provisions

Article 1. The tasks of RSFSR laws on protecting the atmosphere.

The tasks of the laws of the Russian Soviet Federated Socialist Republic on protecting the atmosphere are regulating public attitudes in this area in order to preserve the cleanliness and improve the condition of the atmosphere, prevent and decrease the harmful chemical, physical, biological, and other effects on the atmosphere which cause unfavorable consequences for the population, the country's national economy, and the plant and animal world; and strengthening the laws in the area of protecting the atmosphere.

Article 2. The laws of the USSR and the RSFSR on protecting the atmosphere.

The laws of the USSR and the RSFSR on protecting the atmosphere consist of the USSR law "On Protecting the Atmosphere", other legislative acts of the USSR which have been issued in accordance with it, the present law, and other legislative acts of the RSFSR on protecting the atmosphere.

Article 3. The competency of the USSR in the area of regulating relations concerning the protection of the atmosphere.

In accordance with the USSR law "On Protecting the Atmosphere" the following are subject to the jurisdiction of the USSR in the area of regulating relations concerning the protection of the atmosphere:

- 1) Determining common measures and establishing the primary propositions in the area of protecting the atmosphere;
- 2) The development and approval of all-union plans concerning the protection of the atmosphere;
- 3) Establishing norms for the maximum permissible concentrations of pollution substances in the atmosphere and the levels of their harmful physical effects on it;
- 4) Establishing the procedure for developing and approving norms for the maximum permissible discharge of pollution substances into the atmosphere and norms for their maximum permissible harmful physical effects on it;
- 5) The establishment of a system of state stock-taking of harmful effects on the atmosphere which is common for the USSR;
- 6) State control over the protection of the atmosphere and the establishment of a procedure for carrying it out;
- 7) Solving other questions of union-wide importance in the field of protecting the atmosphere in accordance with the Constitution of the USSR and the USSR law "On Protecting the Atmosphere".

Article 4. The competency of the RSFSR in the area of regulating relations regarding the protection of the atmosphere.

The following are within the jurisdiction of the Russian Soviet Federated Socialist Republic in the area of regulating relations regarding the protection of the atmosphere regardless of the limits of the competency of the USSR: establishing a procedure for protecting the atmosphere; developing and approving republic plans for protecting the atmosphere; exercising state control over the protection of the atmosphere; solving other questions in the area of protecting the atmosphere if they do not pertain to the competency of the USSR.

Article 5. The competency of the autonomous Soviet socialist republics in the area of regulating relations regarding the protection of the atmosphere.

The following are within the jurisdiction of the autonomous Soviet socialist republics in the area of regulating relations regarding the protection of the atmosphere regardless of the limits of the competency of the USSR and the RSFSR; developing and carrying out measures to prevent and eliminate the causes of pollution and other harmful effects on the atmosphere; participating in planning the protection of the atmosphere; exercising state control over its protection; and solving other questions in the field of protecting the atmosphere in accordance with the laws of the USSR, the RSFSR and the autonomous republics.

Article 6. State control in the area of protecting the atmosphere.

In accordance with the USSR law "On Protecting the Atmosphere", state control in the area of protecting the atmosphere is carried out by the USSR Council of Ministers, the RSFSR Council of Ministers, the councils of ministers of the autonomous republics, the executive committees of local councils of peoples deputies, and by specially empowered state bodies in accordance with the laws of the USSR and the RSFSR.

Article 7. The competency of the executive committees of local councils of peoples deputies regarding state control in the area of protecting the atmosphere.

The executive committees of local councils of peoples deputies within the limits and in the manner, which have been established by the laws of the USSR, the present law and other legislative acts of the RSFSR, on their territory: insure the development and carrying out of measures to protect the atmosphere; participate in planning the protection of the atmosphere; exercise state control over its protection; take steps to improve the organization of public services and amenities and the planting of trees and shrubs on the territory of population centers; and solve other questions concerning state control in the area of protecting the atmosphere.

Article 8. Planning measures to protect the atmosphere.

The tasks to protect the atmosphere and the measures to prevent and eliminate the causes of pollution and other harmful effects on it and to improve the condition of the atmosphere are provided for in the state plans for economic and social development.

The draft plans for protecting the atmosphere, which have been developed by the ministries, state committees and departments, enterprises, establishments, and organizations, are coordinated with the bodies, which are exercising state control over the protection of the atmosphere, in the manner prescribed by the laws of the USSR and the RSFSR.

Article 9. The obligation to carry out measures on protecting the atmosphere.

In accordance with the laws of the USSR, the measures, which have been provided for by the plans to protect the atmosphere on the territory of the autonomous republics, krays, oblasts, large industrial centers, and on the territory of the RSFSR as a whole, are subject to being carried out by the enterprises, establishments and organizations which are subordinate to the ministries and state committees and departments of the RSFSR; and by the enterprises, establishments and organizations of the all-union and union republic ministries and USSR state committees and departments.

Article 10. The participation of public organizations and citizens in the carrying out of the measures to protect the atmosphere.

The trade unions, youth organizations, environmental protection society, scientific societies, other public organizations, and citizens assist state bodies in carrying out the measures to protect the atmosphere.

Public organizations participate in the work, which is aimed at insuring the protection of the atmosphere, in accordance with their regulations (statutes) and the laws of the USSR and the RSFSR.

In assisting state bodies in the carrying out of the measures to protect the atmosphere, citizens participate in performing the necessary work, make proposals about improving the protection of the atmosphere, and report violations of the requirements of the laws concerning the protection of the atmosphere, which are known to them.

Article 11. The obligation of state bodies to consider the proposals of public organizations and citizens concerning the protection of the atmosphere.

State bodies are required to give every possible consideration to the proposals of public organizations and citizens when carrying out the measures to protect the atmosphere.

Section 2. Measures To Protect the Atmosphere.

Article 12. The norms for the maximum permissible concentration of pollution substances in the atmosphere and for the level of their harmful physical effects on it.

Norms for the maximum permissible concentration of pollution substances and for the levels of their harmful physical effects on the atmosphere are established in order to evaluate the condition of the atmosphere. These norms must be responsive to the interests of protecting the people's health and protecting the environment.

In accordance with the USSR law "On Protecting the Atmosphere", the norms for the maximum permissible concentrations of pollution substances in the atmosphere and for the levels of their harmful physical effects on it are common for the entire territory of the USSR. In the necessary cases, stricter norms for the maximum permissible concentrations of pollution substances in the atmosphere are established for individual rayons.

These norms and the methods for defining them are approved and implemented in the manner prescribed by the USSR Council of Ministers.

Article 13. The norms for the maximum permissible discharge of pollution substances into the atmosphere and for their harmful physical effect on it.

In order to protect the atmosphere, norms for the maximum permissible discharge of pollution substances by stationary and mobile sources of pollution and norms for their maximum permissible harmful physical effect are established. These norms are established for each stationery source of discharge or other harmful effect on the atmosphere and for each model of transport and other mobile system and installation.

The norms for the maximum permissible discharge of pollution substances into the atmosphere and for their maximum permissible harmful physical effects on it are established at a level, at which the discharge of pollution substances and the harmful physical effects from a specific and all other sources in that rayon will not lead to an exceeding of the norms for the maximum permissible concentrations of pollution substances in the atmosphere and for the maximum permissible levels of their harmful physical effects, considering the prospects for the source's future development.

In accordance with the USSR law "On Protecting the Atmosphere", the mentioned norms, methods of determining them and the types of sources, for which they are being developed, are approved and implemented in a manner prescribed by the USSR Council of Ministers.

Article 14. Regulating harmful effects on the atmosphere when there are no norms.

Harmful effects on the atmosphere, for which the appropriate norms have not been established, may be permitted in exceptional cases in accordance with permits which are issued for a certain period by specially empowered state bodies. The appropriate norm for the maximum permissible harmful effect must be established and the necessary steps to protect the atmosphere must be carried out during this period.

Article 15. Regulating the discharge of pollution substances into the atmosphere by stationary sources of pollution.

The discharge of pollution substances into the atmosphere by stationary sources of pollution is permitted in each case based on a permit issued by specially empowered state bodies. The norms for the maximum permissible discharge of pollution substances and other conditions and requirements, which insure the protection of the atmosphere, are stipulated in the permit.

In accordance with the USSR law "On Protecting the Atmosphere", the procedure for issuing permits for the discharge of pollution substances into the atmosphere by stationary sources of contamination is established by the USSR Council of Ministers.

Article 16. Measures to regulate the discharge of pollution substances into the atmosphere by stationary sources of pollution.

Enterprises, establishments and organizations, whose activity is connected with the discharge of pollution substances into the atmosphere, are required to carry out organizational, economic, technical, and other measures to insure the fulfillment of the conditions and requirements which are stipulated in the permit for the discharge; to take steps to decrease the discharge of pollution substances; to insure the uninterrupted efficient operation of the structures, equipment and gear for cleaning the discharges and checking on them, and their maintenance in working condition; and to continuously meter the amount and composition of the pollution substances which are being discharged into the atmosphere.

The carrying out of the measures to protect the atmosphere must not lead to the contamination of the soil, water and other natural entities.

Article 17. Carrying out measures to protect the atmosphere during emergency situations.

When the norms for the maximum permissible discharge of pollution substances into the atmosphere are exceeded as a result of an emergency situation, the directors of enterprises, establishments and organizations are required to report this immediately to the organs which are exercising state control over the protection of the atmosphere and to take steps to protect the atmosphere and to eliminate the causes and consequences of its pollution in the prescribed manner.

Article 18. Measures to decrease the discharge of pollution substances into the atmosphere by stationary sources of pollution in connection with anticipated unfavorable meteorological conditions.

Upon receiving a warning about a possible increase in the concentration of pollution substances in the atmosphere in connection with anticipated unfavorable meteorological conditions, enterprises, establishments and organizations are required to take measures to decrease the discharge of these substances into the atmosphere — measures which have been specially developed in accordance with the bodies which are exercising state control over the protection of the atmosphere.

Article 19. Limiting, halting, and banning the discharge of pollution substances into the atmosphere.

When there is a violation of the conditions and requirements stipulated by the permits and when a threat to the health of the population arises, the discharge of pollution substances into the atmosphere must be limited, halted or forbidden in accordance with a decision of the body which is exercising state control over the protection of the atmosphere, up to halting the activity of individual industrial assemblies, shops, enterprises, establishments, and organizations.

Article 20. Regulating the discharge of pollution substances into the atmosphere by motor vehicles, airplanes and other mobile systems and assemblies.

Ministries, state committees and departments, enterprises, establishments and organizations, which design, produce and operate motor vehicles, airplanes, ships and other mobile systems and assemblies, are required to develop and carry out a series of measures to prevent and decrease the discharge of pollution substances into the atmosphere by these systems and assemblies.

The amount of pollution substances, which is discharged by transport and other mobile systems and assemblies, must not exceed the norms for the maximum permissible discharge.

Article 21. Checking on the observance of the norms for the maximum permissible discharge of pollution substances by transport and other mobile systems and assemblies which are in use.

All transport and other mobile systems and assemblies, which are in operation, must be subjected to a check for the observance of the norms for the maximum permissible discharge of pollution substances. In accordance with the USSR law "On Protecting the Atmosphere", the regulations for checking on the observance of these norms are established in a manner determined by the USSR Council of Ministers.

Article 22. Banning the production and operation of transport and other mobile systems and assemblies whose discharges of pollution substances exceed the established norms.

The production and operation of transport and other mobile systems and assemblies, whose discharge of pollution substances exceeds established norms, are not permitted.

Article 23. Regulating harmful physical effects on the atmosphere.

Local councils of peoples deputies, ministries, state committees, departments, enterprises, establishments, and organizations are required to develop and carry out measures to prevent, decrease and eliminate the harmful effects of sound vibrations, including noise, radiation, etc. on the atmosphere.

In order to combat production and other noises, the following must be specifically carried out: introducing low noise level technological processes; improving the construction of transport systems and their operation and the maintenance of railroad and streetcar lines, motor vehicle roads and street pavements; locating air fields, airports and industrial and other structures and equipment, which are sources of noise, at the required distance from population centers and housing areas; improving the planning and construction of cities and other population centers; and carrying out organizational measures to prevent and decrease everyday noise.

The locating of factories, which are of an industrial nature, and also of equipment, which is a source of increased noise and vibration, in living quarters is not permitted.

Article 24. The conditions under which certain types of harmful physical effects on the atmosphere can be permitted.

In cases which have been defined by the laws of the USSR, certain types of harmful and physical effects on the atmosphere can be permitted but only based on permits which are issued by specially empowered state bodies.

Article 25. The halting, limiting or banning of activity by certain industrial and other assemblies, shops, enterprises, establishments, and organizations, which are violating the maximum norms for harmful physical effects on the atmosphere.

Any harmful physical effect on the atmosphere is permitted on condition that the established maximum permissible norms are observed and in cases where a permit has been issued for it— where the other requirements, stipulated by this permit, are observed. When there is a violation of these requirements, the appropriate activity of the individual industrial and other assemblies, shops, enterprises, establishments, and organizations can be halted, limited or banned based on a decision of the body which is exercising state control over the protection of the atmosphere until the reasons, which have caused the exceeding of the maximum permissible norms or the violation of the requirements, which have been stipulated in the permit, have been eliminated.

Article 26. Protecting the atmosphere by limiting the movement of motor vehicles and other mobile systems.

In order to protect the atmosphere, local councils of peoples deputies can in accordance with the laws of the USSR and the RSFSR limit the entry of transport and other mobile systems and assemblies into population centers, certain areas, and rest and tourist areas.

Article 27. The citizen's observance of the established requirements to combat every-day noise.

Citizens are required to observe the requirements which have been established to combat every-day noise in apartments, the yards of living quarters, on the streets, in rest areas, and other public places.

Article 28. The siting, designing, construction and commissioning of enterprises, structures and other installations which affect the condition of the atmosphere.

When siting, designing, constructing, and commissioning new and reconstructed enterprises, structures, and other installations; and when improving existing and incorporating new technological processes and equipment, it is necessary to insure the observance of the norms for harmful effects on the atmosphere. In doing this, the trapping recovery and rendering harmless of harmful substances and wastes or the complete elimination of pollution substances, and the carrying out of other requirements to protect the atmosphere must be stipulated based on the fact that the aggregate of the discharges and of the harmful effects from enterprises, structures and other installations, which are being designed in operation, and being planned for future construction, downot lead to an exceeding of the norms for the maximum permissible concentrations of pollution substances in the atmosphere and of the norms for the maximum permissible levels of harmful physical effects on it.

In addition, the necessity for organizing sanitary protective zones around them must be considered when siting, designing, constructing, and commissioning new and reconstructed enterprises, structure and other installations.

Article 29. Examining proposals for siting new and reconstructed enterprises, structures and other installations which have an effect on the condition of the atmosphere.

Regardless of their departmental subordination, the review of proposals to locate on the territory of the RSFSR new and reconstructed enterprises, structures and other installations, which affect the condition of the atmosphere, is carried out in the manner established by the RSFSR Council of Ministers.

Article 30. Coordinating the construction sites and plans for the construction and reconstruction of enterprises, structures and other installations which affect the condition of the atmosphere.

The determination of construction sites and the plans for the construction and reconstruction of enterprises, structures and other installations, which affect the condition of the atmosphere, are coordinated with the bodies, which exercise state control over the protection of the atmosphere, and with other bodies in accordance with the laws of the USSR and the RSFSR.

Article 31. Conditions for banning the commissioning of installations which affect the condition of the atmosphere.

The commissioning of new and reconstructed enterprises, structures and other installations, which do not satisfy the requirements for protecting the atmosphere, is forbidden.

Article 32. Equipping sources of atmospheric pollution with cleansing systems.

Regardless of the time that they were commissioned, enterprises, establishments and organizations, whose activity is linked with the discharge of pollution substances into the atmosphere, must be equipped with structures, equipment and gear to cleanse discharges into the atmosphere and with systems for checking on the amount and composition of the discharged pollution substances.

Article 33. Exercising control over the designing, construction and operation of structures, equipment and gear for cleansing the discharges, which are contaminating the atmosphere, and for decreasing the harmful physical effect on it.

Ministries, state committees and departments are required to exercise control over the designing, construction and operation of structures, equipment and gear for cleaning pollution substances from the discharges into the atmosphere and for lowering the harmful physical effect on it and over the equipping of them with the instruments which are required for continuous observation of the effectiveness of the cleaning, the magnitude of the discharges and the harmful physical effects on the atmosphere.

Article 34. Fulfilling the requirements for protecting the atmosphere when siting and developing cities and other population centers.

The condition of the atmosphere, a forecast of its change and the task of protecting the atmosphere from harmful effects must be considered when planning the siting and development of cities and other population centers.

The designing, construction and reconstruction of cities and other population centers are conducted in accordance with the sanitary, hygienic and other norms and rules for protecting the atmosphere.

The councils of peoples deputies must take steps to improve the organization of public services and amenities and the planting of trees and shrubs on the territory of population centers; and enterprises, establishments and organizations on the production and other areas, which are occupied by them, in order to prevent or decrease pollution of the atmosphere.

Composite measures to normalize the atmosphere are developed and carried out in the prescribed manner in areas whose atmosphere is affected by the activity of a group of enterprises, establishments and organizations.

When it is impossible to decrease the discharge of pollution substances and the harmful physical effects on the atmosphere to the established norms, the appropriate enterprises, structures and other installations are closed or their production profile is subjected to a change.

Article 35. Observing the requirements for protecting the atmosphere when introducing discoveries, inventions, and new technical systems and also when purchasing imported equipment.

In accordance with the USSR law "On Protecting the Atmosphere", the introduction of discoveries, inventions, rationalizer proposals, new technical systems, substances and materials; and also the acquiring of technical equipment and other items in foreign countries are forbidden if they do not satisfy the requirements established in the USSR for protecting the atmosphere and are not equipped with technical systems for checking on discharges into the atmosphere.

Article 36. Fulfilling the requirements for protecting the atmosphere when using plant protection systems, mineral fertilizers and other preparations.

The list of plant protection systems, growth stimulators, mineral fertilizers, and other preparations whose use is permitted in the national economy and also the ways for using them are subject to coordination with the specially empowered organs of state control over the protection of the atmosphere in the manner prescribed by the laws of the USSR.

When creating new preparations which are to be employed for these purposes, norms for maximum permissible concentrations and methods for determining the residual amounts of these preparations in the atmosphere must be developed.

Kolkhozes, sovkhozes, other enterprises, establishments, organizations, and citizens must observe the regulations for transporting, storing and using plant protection systems, growth stimulators, mineral fertilizers, and other preparations so as not to allow their pollution of the atmosphere.

Article 37. Fulfilling the requirements for protecting the atmosphere when mining minerals and siting and operating waste heaps and dumps.

The mining of minerals, blasting operations, and the siting and operation of waste heaps and dumps must be performed by observing the rules for preventing or decreasing pollution of the atmosphere using methods which have been coordinated with the bodies which exercise state control over the protection of the atmosphere and with other bodies in accordance with the laws of the USSR and the RSFSR.

Article 38. Banning the siting of waste heaps and dumps and the storage of industrial and other wastes, which are a source of atmospheric pollution, in population centers; and banning the burning of these wastes.

The siting of waste heaps and dumps and the storage of industrial wastes, production and every day rubbish and other refuse, which are sources of atmospheric pollution because of their dust and harmful gas generation and foul smelling substances, and the burning of these wastes on the territories of enterprises, establishments, organizations, and population centers are forbidden except for cases where the burning is performed with the use of special equipment and where the requirements for protecting the atmosphere are observed.

Article 39. The obligations for removing wastes which pollute the atmosphere.

Enterprises, establishments and organizations are required to insure the timely removal of wastes, which could pollute the atmosphere, to enterprises using them as raw material or to special dumps.

Article 40. Requirements when designing installations and creating and improving technological processes and equipment which require air for production needs.

When designing enterprises, structures and other installations and when creating and improving technological processes and equipment, measures, which insure the minimum required use of air for production needs, must be stipulated.

Article 41. Regulating the requirement for air for production needs.

The requirement for air for production needs can be limited, halted or banned by the bodies, which are exercising state control over the protection of the atmosphere, in a case where this will lead to changes in the condition of the atmosphere which would have a harmful effect on the health of people and the animal and plant world.

Article 42. Regulating the effect on weather and climate.

Actions, which are aimed at an artificial change in the condition of the atmosphere and of atmospheric phenomena for national economic purposes, can be performed by ministries, state committees and departments, enterprises, establishments, and organizations only with the permission of specially empowered state bodies and only on condition that this will not lead to an unfavorable effect on the weather and climate.

Article 43. Material and moral incentives for carrying out measures to protect the atmosphere.

Material and moral incentive measures for enterprises, establishments organizations and citizens, which stimulate the performance of measures to protect the atmosphere, can be established by laws of the USSR and the RSFSR.

When summing up the results of socialist competition among enterprises, establishments and organizations, their performance of plans and measures to protect the atmosphere must be considered.

Section 3. State Stock-taking of Harmful Effects on the Atmosphere.

Article 44. State stock-taking of harmful effects on the atmosphere.

Objects which exert a harmful effect on the atmosphere, the types and amount of harmful substances emitted into the atmosphere, and the types and dimensions of harmful physical effects on it are subject to state stock-taking.

In accordance with the USSR law "On Protecting the Atmosphere", state stock-taking of objects and their harmful effect on the atmosphere is carried out at state expense using a system which is common for the USSR and in the manner determined by the USSR Council of Ministers.

Section 4. Observation and Control in the Area of Protecting the Atmosphere

Article 45. Observing the condition of the atmosphere.

In accordance with the USSR law "On Protecting the Atmosphere", the observation of the condition of the atmosphere using chemical, physical, and biological indicators is done by the state-wide service for observing and checking on the level of environmental pollution and is carried out in the manner determined by the laws of the USSR.

The collection, storage, search, and processing of information on the atmosphere's condition is carried out using a common system.

The support of interested state and public bodies, enterprises, establishments and organizations with regular information and forecasts about the pollution levels of the atmosphere influenced by economic activity and meteorological conditions, has been placed upon the state-wide service for observing and checking on the level of environmental pollution.

Article 46. Carrying out measures when the condition of the atmosphere threatens the people's health.

If a threat arises to the health of the people because of an unfavorable combination of meteorological factors, the discharge of pollution substances into the atmosphere and other harmful effects on the atmosphere, the bodies of the statewide service for observing and checking on the level of environmental pollution must immediately report this to the RSFSR Council of Ministers, the appropriate councils of ministers of the autonomous republics, the executive committees of local councils of peoples deputies, and interested enterprises, establishments and organizations.

Upon receipt of such reports, the RSFSR Council of Ministers, the councils of ministers of the autonomous republics and the executive committees of local councils of peoples deputies shift the work of enterprises, establishments, organizations, and transport systems to a special operating mode or temporarily halt it in the prescribed manner so as to decrease the intensity of the discharges and eliminate the other harmful effects on the atmosphere. When necessary, they carry out a temporary evacuation of the population and take other urgent measures.

Article 47. State control over the protection of the atmosphere.

State control over the protection of the atmosphere has as its task the insuring of the fulfillment of atmospheric protection measures by all ministries, state committees and departments, state, cooperative and other public enterprises, establishments and organizations, and citizens; and the observance of the conditions for discharging pollution substances and other harmful effects on the atmosphere and also of the other rules which have been established by laws on protecting the atmosphere.

Article 48. The bodies which exercise state control over the protection of the atmosphere.

In accordance with the USSR law "On Protecting the Atmosphere", state control over the protection of the atmosphere is exercised by the councils of peoples deputies, their executive and administrative bodies and by specially empowered state bodies in a manner prescribed by the laws of the USSR.

Article 49. Departmental control over the protection of the atmosphere.

Departmental control over the protection of the atmosphere, including that over the observance of the norms for the maximum permissible discharge of pollution substances into the atmosphere and those for the harmful physical effects on it, is exercised by the bodies under whose jurisdiction the enterprises, establishments and organizations, which are exerting a harmful effect on the atmosphere, are located.

When exercising departmental control, ministries, state committees and departments are required to be guided by the laws of the USSR and the RSFSR and the regulations and instructions which have been approved by the specially empowered bodies for state control over the protection of the atmosphere.

Section 51. Resolving Disputes on Questions Concerning the Protection of the Atmosphere.

Article 50. Bodies which resolve disputes on matters pertaining to the protection of the atmosphere.

Disputes concerning matters related to the protection of the atmosphere are resolved by the RSFSR Council of Ministers, the council of ministers of the autonomous republics, the executive committees of local councils of peoples deputies, and specially empowered state bodies in the manner prescribed by the laws of the USSR, the present law and other laws of the RSFSR.

Article 51. The procedure for resolving disputes concerning matters on protecting the atmosphere which arise between the state and public organizations of the RSFSR and the state and public organizations of another union republic.

In accordance with the USSR law "On Protecting the Atmosphere", disputes between the state and public organizations of the RSFSR and the state and public organizations of another union republic on matters pertaining to the protection of the atmosphere are examined by a commission which is formed from representatives of the RSFSR and other interested union republics on an equal footing. In the event that the commission does not come to an agreed solution, the disputes on these matters are subject to a review in the manner determined by the USSR Council of Ministers.

Article 52. The procedure for solving disputes between the state and public organizations of autonomous republics on matters concerning the protection of the atmosphere.

Disputes between the state and public organizations of one autonomous republic and the state and public organizations of another autonomous republic on matters concerning the protection of the atmosphere are examined by a commission which is formed from representatives of the interested autnomous republics who are on an equal footing.

In the event that the commission does not come to an agreed solution, disputes on these matters are subject to review in a manner which is defined by the RSFSR Council of Ministers.

Disputes between the state and public organizations of an autonomous republic and the state and republic organizations of a kray or oblast on matters concerning the protection of the atmosphere are examined in the same manner.

Article 53. The procedure for resolving disputes between the state and public organizations of krays and oblasts on matters concerning the protection of the atmosphere.

Disputes between the state and public organizations of one kray or oblast and the state and public organizations of another kray or oblast on matters concerning the protection of the atmosphere are examined by a commission which is formed from representatives of the interested krays and oblasts who are on an equal footing.

In the event that the commission does not come to an agreed solution, disputes on these matters are subject to review in a manner which is determined by the RSFSR Council of Ministers.

Article 54. The procedure for reviewing disputes on matters concerning the protection of the atmosphere by the executive committees of local councils of peoples deputies.

Disputes between state and public organizations on matters pertaining to the protection of the atmosphere are examined by the executive committees of local councils of peoples deputies upon the application of one of the parties.

In order to prepare the material for solving these disputes, the executive committees of the local councils of peoples deputies can, when necessary, form commissions composed of deputies from the local councils of peoples deputies, representatives of the bodies which exercise control over the protection of the atmosphere and of other interested bodies, and the appropriate specialists.

The executive committee of the local council of peoples deputies which is examining the dispute on questions concerning the protection of the atmosphere, makes a decision in which the procedure for carrying out the decision and the measures for restoring the violated right of the state or public organization can be stipulated.

Section 6. Responsibility for a Violation of the Laws On Protecting the Atmosphere.

Article 55. Responsibility for a violation of the laws on protecting the atmosphere.

Persons, who are guilty of committing the following violations of the laws concerning the protection of the atmosphere:

exceeding the norms for the maximum permissible discharge of pollution substances into the atmosphere;

exceeding the norms for the maximum permissible harmful physical effects on the atmosphere;

discharging pollution substances into the atmosphere without the permission of the specially empowered state bodies;

violating the operating rules and also failing to use the prescribed structures, equipment and gear for cleaning and checking on discharges into the atmosphere;

commissioning new and reconstructed enterprises, structures and other installations which do not satisfy the requirements for protecting the atmosphere;

the production and operation of motor vehicles, airplanes, ships, and other mobile systems and assemblies whose discharge of pollution substances exceeds the established norms;

incorporating discoveries, inventions, rationalizer proposals, new technical systems, substances and materials and also buying technological equipment and other items in foreign countries which do not satisfy the requirements for protecting the atmosphere which have been established in the USSR, and which are not equipped with technical systems for checking on discharges into the atmosphere;

violating the rules for storing industrial and every-day wastes;

transporting, storing and using plant protection systems, growth stimulators, mineral fertilizers, and other preparations which involve or may involve pollution of the atmosphere;

failing to carry out the directions of the bodies which exercise state control over the protection of the atmosphere,

are criminally, administratively or otherwise liable in accordance with the laws of the USSR and the RSFSR.

Liability for other violations of the laws on protecting the atmosphere can be established by laws of the USSR and the RSFSR.

Article 56. Compensation for the damage which has been caused as a result of a violation of the laws on protecting the atmosphere.

Enterprises, establishments, organizations and citizens are required to compensate for the harm which has been caused by a violation of the laws on protecting the atmosphere in the amounts and procedure which have been established by the laws of the USSR and the RSFSR. Officials and other workers, due to whose fault the enterprises, establishments and organizations incurred the expenses connected with compensating for the loss, are materially liable in the prescribed manner.

Section 7. International Treaties.

Article 57. International treaties.

If other regulations than those, which are contained in Soviet laws on protecting the atmosphere, are established by an international treaty of the USSR, then the regulations of the international treaty are applicable.

The same procedure is applicable with regard to RSFSR laws on protecting the atmosphere if rules other than those which have been provided by RSFSR laws on protecting the atmosphere, are established in an international treaty of the RSFSR.

Chairman of the Presidium of the RSFSR Supreme Soviet M. Yasnov

Secretary of the Presidium of the RSFSR Supreme Soviet Kh. Neshkov

Moscow, Kremlin, 14 July 1982

Decree of the RSFSR Supreme Soviet on the Procedure for Implementing the RSFSR Law "On Protecting the Atmosphere"

In connection with the adoption of the RSFSR law "On Protecting the Atmosphere", the Supreme Soviet of the Russian Soviet Federated Socialist Republic resolves:

- 1. To implement the RSFSR law "On Protecting the Atmosphere" on 1 November 1982.
- 2. To establish that the RSFSR law "On Protecting the Atmosphere" is applicable to relations which arise after the implementation of the law, that is, after 1 November 1982.

In the legal relationships which arise before the implementation of the RSFSR law "On Protecting the Atmosphere", the exercise of the rights and duties of the participants in these legal relationships is regulated from 1 November 1982 in accordance with the mentioned law.

3. The rules, which are contained in the RSFSR law "On Protecting the Atmosphere" and which have been established by the USSR law "On Protecting the Atmosphere",

are applicable from the day of the implementation of the USSR law, that is, from 1 January 1981, in accordance with the decree of the USSR Supreme Soviet dated 25 June 1980 entitled "On the Procedure for Implementing the USSR Law 'On Protecting the Atmosphere'" (VEDOMOSTI VERKHOVNOGO SOVETA SSR, No 27, 1980, Art. 529).

- 4. The harmful effects on the atmosphere, which are mentioned in Article 14 of the RSFSR law "On Protecting the Atmosphere" and for which the appropriate norms have not been established, may be permitted temporarily after the implementation of the law until permits for these affects are obtained in the prescribed manner if they shall not be forbidden by the specially empowered state bodies.
- 5. To establish that the agreements on the conditions for discharging pollution substances into the atmosphere, which were issued before the implementation of the RSFSR law "On Protecting the Atmosphere", remain in force until the expiration of the period stipulated during the issuance of these agreements if an earlier period for obtaining the permits, which are provided by the first part of Article 15 of the law, has not been determined in the prescribed manner or a basis for limiting, halting or banning discharges has not arisen.
- 6. In accordance with Article 5 of the USSR Supreme Soviet decree dated 25 June 1980 entitled "On the Procedure for Implementing the USSR law 'On Protecting the Atmosphere'", enterprises, establishments and organizations, whose activity is linked with the discharge of pollution substances into the atmosphere and which are not equipped with the structures, equipment and gear which are mentioned in Article 32 of the RSFSR law "On Protecting the Atmosphere" and with systems for checking on the amount and composition of discharged pollution substances by the time of the implementation of the USSR law "On Protecting the Atmosphere", are to be equipped with them in accordance with the state plans for economic and social development in a manner determined by the USSR Council of Ministers.
- 7. In accordance with Article 6 of the USSR Supreme Soviet decree "On the Procedure for Implementing the USSR Law 'On Protecting the Atmosphere'", enterprises, establishments and organizations, which have stationary sources of pollution, must develop and coordinate with the specially empowered bodies for state control over the protection of the atmosphere plans for lessening discharges, which provide for the observance of the norms for the maximum permissible concentrations of pollution substances in the atmosphere in areas where the content of pollution substances in the atmosphere exceeds the norms for the maximum permissible concentrations at the time of the implementation of the USSR law "On Protecting the Atmosphere". During the realization of the mentioned plans, the specially empowered state bodies have a right to temporarily establish coordinated quantities for discharges of pollution substances.
- 8. To entrust the Presidium of the RSFSR Supreme Soviet with bringing the laws of the RSFSR into agreement with the RSFSR law "On Protecting the Atmosphere".

9. The RSFSR Council of Ministers with bringing the decision of the RSFSR government into agreement with the RSFSR law "On Protecting the Atmosphere".

Chairman of the Presidium of the RSFSR Supreme Soviet M_{\bullet} Yasnov

Secretary of the Presidium of the RSFSR Supreme Soviet Kh. Neshkov

Moscow, Kremlin, 14 July 1982

8802

CSO: 5000/15

PRESIDIUM DECREE ON ANIMAL PROTECTION, UTILIZATION

Moscow VEDOMOSTI VERKHOVNOGO SOVETA ROSSIYSKOY SOVETSKOY FEDERATIVNOY SOTSIALIST-ICHESKOY RESPUBLIKI in Russian No 29, 22 Jul 82 pp 646-661

[Law No 1029 of the RSFSR Supreme Soviet Presidium on Protecting and Using Animals and Decree No 1030 on the Procedure for Implementing the RSFSR Law "On Protecting and Using Animals"]

[Text] Law of the Russian Soviet Federated Socialist Republic on Protecting and Using the Animal World.

The animal world is one of the primary components of the natural surroundings and an important component part of our motherland's natural riches. It serves as a source for obtaining industrial and medicinal raw materials, food products and other material valuables which are required to satisfy the needs of the population and the national economy. The animal world is also used for scientific, cultural, enlightenment, and esthetic purposes.

The Constitution of the USSR and the Constitution of the RSFSR make provisions for the necessary measures to protect and use the animal world in a scientifically sound and rational manner to be taken in the interest of the present and future generations of the USSR, which the Russian Soviet Federated Socialist Rebpulic has joined with the other union republics on the basis of voluntary union and equality. These measures are being implemented in accordance with the state plans for the economic and social development of the USSR and the RSFSR and with the active participation of state and public organizations and citizens.

Soviet laws have been called upon to contribute to the effective protection and rational use of the animal world and to the rearing of the Soviet people in the spirit of a proprietary and humane attitude toward the animal world.

Section I. General Provisions

Article I. The tasks of RSFSR laws on protecting and using the animal world.

The tasks of the Russian Soviet Federated Socialist Republic's legislation on protecting and using the animal world are regulating public attitudes on protecting and using wild animals in order to insure the conditions for their existence in a state of natural freedom, preserving the integrity of their natural associations and rational use, and strengthening legality in this area.

Article 2. The laws of the USSR and the RSFSR on protecting and using the animal world.

The laws of the USSR and the RSFSR on protecting and using the animal world consist of the USSR law "On the Protection and Use of the Animal World" and the other legislative acts of the USSR which have been published in accordance with it, and the present law and other legislative acts of the RSFSR concerning the protection and use of the animal world.

The laws on protecting and using the animal world regulate relations in the area of protecting and using the wild animals (mammals, birds, reptiles, amphibians, fish, shell fish, insects, etc.) which dwell in a state of natural freedom on dry land, in the water, atmosphere, and soil; which permanently or temporarily inhabit the country's territory; or which are related to the natural riches of the USSR continental shelf.

Relations in the area of using and protecting agricultural and other domestic animals as well as wild animals who are kept in captivity or in semi-free conditions for economic, cultural, scientific, esthetic, and other purposes, are regulated by the appropriate laws of the USSR and the RSFSR. Responsibility for a violation of the rules on protecting, keeping and using the above mentioned animals is prescribed by the law of the USSR and the RSFSR.

Article 3. State (public) ownership of the animal world in the USSR.

In accordance with the USSR law "On Protecting and Using the Animal World", the animal world in the Union of Soviet Socialist Republics is state property -- the common property of all Soviet people.

Actions, which directly or secretly violate the law of state ownership of the animal world in the USSR, are forbidden.

Article 4. The competency of the USSR in the area of regulating relations concerning the protection and use of the animal world.

In accordance with the USSR law "On Protecting and Using the Animal World", the following are within the jurisdiction of the USSR in the area of regulating relations in the protection and use of the animal world:

- 1) Direction of the animal world within the limits necessary for exercising the authority of the USSR in accordance with the Constitution of the USSR;
- 2) Determination of general measures and establishment of primary propositions, rules and norms in the area of protecting and using the animal world;
- 3) Development and approval of union-wide plans for the protection and rational use of the animal world;

- 4) Establishment of a single system for the USSR for the state stock-taking of animals and their use and of a procedure for conducting the state cadastre of the animal world;
- 5) State control over the protection and use of the animal world and establishment of a procedure to carry it out;
- 6) Solution of other questions of a union-wide significance in the area of protecting and using the animal world in accordance with the Constitution of the USSR and the USSR law "On Protecting and Using the Animal World".

Article 5. The competency of the RSFSR in the area of regulating relations concerning the protection and use of the animal world.

The following are within the jurisdiction of the Russian Soviet Federated Socialist Republic in the are of regulating relations concerning the protection and use of the animal world regardless of the limits of the competency of the USSR: direction of the animal world on the territory of the republic and establishment of a procedure to protect and use it; development and approval of republic plans to protect and rationally use the animal world; exercising of state control over the protection and use of the animal world; and the solution of other questions in the area of protecting and using the animal world if they do not pertain to the competency of the USSR.

Article 6. The competency of the autonomous Soviet socialist republics in the area of regulating relations concerning the protection and use of the animal world.

The following are within the jurisdiction of the autonomous Soviet socialist republics in the area of regulating relations concerning the protection and use of the animal world regardless of the limits of the competency of the USSR and the RSFSR: development and carrying out of measures to protect and rationally use the animal world; participation in the planning to protect and rationally use the animal world; the exercising of state control over its protection and use; and the solving of other questions in the field of protecting and using the animal world in accordance with the laws of the USSR, the RSFSR and the autonomous republics.

Article 7. State control in the area of protecting and using the animal world.

In accordance with the USSR law "On Protecting and Using the Animal World", state control in the area of protecting and using the animal world is carried out by the USSR Council of Ministers, the RSFSR Council of Ministers, the councils of ministers of the autonomous republics, the executive committees of local councils of peoples deputies, specially empowered state bodies for the protection and regulation of the use of the animal world, and other state bodies in accordance with the laws of the USSR and the RSFSR.

Article 8. Specially empowered state bodies for the preservation and regulation of the use of the animal world.

The specially empowered state bodies for the protection and regulation of the use of the animal world on RSFSR territory are the USSR Ministry of the Fish Industry, the Main Administration of Hunting and Game Preserves of the RSFSR Council of Ministers, and other specially empowered organs in accordance with the laws of the USSR and the RSFSR.

Article 9. The competency of executive committees of local councils of peoples deputies for state control in the field of protecting and using the animal world.

On their territory, the executive committees of local councils of peoples deputies within the limits and procedures which have been established by USSR legislation, the present law, and other legislative acts of the RSFSR: insure the development and carrying out of measures to protect and rationally use the animal world; participate in planning the protection and rational use of the animal world; exercise state control over its protection and use; and solve other matters connected with state control in the area of protecting and using the animal world.

Article 10. The planning of measures to protect and rationally use the animal world.

The tasks and measures to protect and rationally use the animal world are provided for in the state plans for economic and social development.

The drafts of the plans to protect and rationally use the animal world, which have been developed by the ministries, state committees and departments, enterprises, establishments, and organizations, are coordinated with the specially empowered state organs for the protection and regulation of the use of the animal world in the manner established by the laws of the USSR and the RSFSR.

Article 11. The obligation of fulfilling the measures to protect and rationally use the animal world.

The measures, which have been provided for by the plans to protect and rationally use the animal world on the territories of the autonomous republics, krays, oblasts, and large industrial centers and on the territory of the RSFSR as a whole, are subject in accordance with the laws of the USSR to fulfillment by the enterprises, establishments and organizations which are subordinate to the ministries and state committees and departments of the RSFSR; and by the enterprises, establishments and organizations of the all-union and union republic ministries and state committees and departments of the USSR.

Article 12. The basic requirements for the preservation and use of the animal world.

When planning and carrying out measures, which can affect the environment in which the animals live and the condition of the animal world, the observance of the following main requirements must be assured:

Preservation of the specific variety of animals in a condition of natural freedom;

Preservation of the surroundings in which the animals live, the conditions for their multiplications and their migration paths;

Preservation of the integrity of the animals' natural associations;

Scientifically sound and rational use and reproduction of the animal world;

Regulation of the number of animals in order to preserve the health of the population and to prevent a loss to the national economy.

Article 13. The participation of public organizations and citizens in the carrying out of measures to protect and use the animal world.

The professional unions, youth organizations, the environmental protection society, the societies of hunters and fisherman, scientific societies and other public organizations as well as citizens provide help to the state organs in carrying out the measures to protect and rationally use the animal world.

The public organizations participate in the work, which is aimed at insuring the protection and rational use of the animal world, in accordance with their regulations (statutes) and the laws of the USSR and the RSFSR.

In providing assistance to the state bodies in carrying out the measures to protect and rationally use the animal world, the citizens participate in the performance of the required work, make suggestions about improving the protection and rational use of the animal world, and report violations of the laws on protecting and using the animal world, which are known to them.

The state bodies are required to thoroughly consider the proposals of public organizations and citizens when carrying out measures to protect and rationally use the animal world.

Article 14. Public inspectorates.

Public inspectorates may be created to assist state bodies in protecting the animal world.

The statutes on public inspectorates are approved in the manner established by the laws of the USSR and the RSFSR.

Section 2. Use of the Animal World

Article 15. Users of the animal world.

In accordance with the USSR law "On Protecting and Using the Animal World", the users of the animal world may be state, cooperative and other public enterprises, establishments, and organizations as well as citizens of the USSR.

In cases which are provided for by the laws of the USSR and the RSFSR, the users of the animal world may also be other organizations and persons.

Article 16. The ways of using the animal world.

When observing the requirements which have been prescribed by the laws of the USSR and the RSFSR, the following ways to use the animal world may be carried out;

- 1) Hunting;
- 2) Fishing, including the catching of aquatic invertebrates and sea mammals;
- 3) The catching of animals which are not related to the objects of hunting and fishing;
- 4) The use of the animal world for scientific, cultural, enlightenment, educational, and esthetic purposes;
- 5) The use of the beneficial features of the animals vital activity -- soil formation, natural cleansing of the environment, pollination of plants, etc.;
- 6) The use of animals in order to obtain products from their vital activity.

Other types of animal usage may also be provided for by the laws of the USSR and the RSFSR.

Article 17. Conditions for the use of the animal world.

The periods for performing the individual types of animal usage are established in the manner defined by the laws of the USSR and the RSFSR. Use of the animal world is free of charge. The laws of the USSR and the RSFSR can establish cases and procedures for using the animal world for a fee.

Article 18. Hunting.

The industrial catching of wild animals and birds as well as amateur and sports hunting are carried out in the prescribed manner.

Article 19. Management of hunting.

The right to manage hunting on hunting lands can be granted to state, cooperative and other public enterprises, establishments and organizations. The mentioned enterprises, establishments and organizations are required to perform measures for the protection and reproduction of the wild animals on these lands.

The right of managing hunting within the definite limits of the hunting lands is granted for a period of no less than 10 years based on a biological and economic investigation of the hunting lands for their subsequent hunting management arrangement and organization.

The state, cooperative and other public enterprises, establishments and organizations, on whose lands hunting areas are located, are required to assist the enterprises, establishments and organizations, which are managing hunting in these areas, in the implementation of measures to organize the management of hunting, protect and breed wild animals and birds.

Article 20. Rules for hunting and managing hunting.

The rules for hunting and managing hunting are established in the manner which is determined by the laws of the USSR and the RSFSR.

Article 21. Fishing.

The industrial catching of fish, the catching of aquatic invertebrates and sea mammals, and the amateur and sports catching of fish and catching of aquatic invertebrates are carried out in the manner prescribed.

Article 22. The industrial catching of fish and the catching of aquatic invertebrates and sea mammals.

The right to manage the the industrial catch of fish and the catching of aquatic invertebrates and sea mammals in the industrial sections of fish-farm water bodies can be granted to state, cooperative and other public enterprises, establishments and organizations. The mentioned enterprises, establishments and organizations are obliged to carry out measures for the protection and reproduction of the fish, aquatic invertebrates and sea mammals in these sections of the water bodies.

Article 23. Rules for fishing for and catching aquatic invetebrates and sea mammals.

The rules for fishing for and catching aquatic invetebrates and sea mammals are established in the manner determined by the laws of the USSR.

Article 24. The catching of animals which are not the subjects of hunting and fishing.

The catching of animals, which are not the subjects of hunting and fishing, is authorized for enterprises, establishments, organizations, and citizens.

Lists of the types of animals, which are not the subject of hunting and fishing and whose catching is done only with the permission of the specially empowered state bodies for protecting and regulating the use of the animal world, and lists of those types of animals, whose catching is forbidden, are determined in the manner defined by the laws of the USSR and the RSFSR.

Article 25. Using the animal world for scientific, cultural, enlightenment, educational and esthetic purposes.

The use of the animal world for scientific, cultural, enlightenment, indoctrinational and esthetic purposes (by means of various forms of observation, marking, photographing, etc.) without removing the animals from their natural surroundings is permitted, if this does not inflict harm upon the animals or their dwelling place and does not violate the rights of other users of the animal world, with the exception of cases where this use is forbidden.

The use of the animal world for scientific, cultural, enlightenment, indoctrinational, and esthetic purposes is also permitted with the removal of the animals from their natural surroundings in the manner prescribed by the USSR law "On Protecting and Using the Animal World", other USSR legislative acts, the present law, and other RSFSR legislative acts.

Article 26. Using the beneficial features of the animal's vital activity.

Using the beneficial features of the animal's vital activity -- soil formation, natural cleansing of the environment, pollination of plants, etc. -- is permitted without removing animals from their natural surroundings, except for cases which are defined in the procedure established by the laws of the USSR and the RSFSR.

Article 27. Using animals to obtain the products of their vital activity.

Using animals in order to obtain the products of their vital activity (honey and wax from wild bees, etc.) is permitted only without removing and destroying the animals and without violating the surroundings of their dwelling places.

The rules for using animals to obtain the products of their vital activity are established by the specially empowered state bodies for protecting and regulating the use of the animal world.

Article 28. Regulating the number of animals.

Measures are taken to regulate the number of individual types of wild animals in order to protect the health of the population, protect agricultural and other domestic animals against illnesses, and prevent losses to the national economy.

Measures to regulate the number of individual types of animals must be carried out by humane methods which prevent the causing of harm to other types of animals and by methods which insure the safekeeping of the surroundings in which the animals live.

The types of animals, whose number is subject to regulation, and the procedure for carrying out measures to regulate their number are determined by the specially empowered state organs for protecting and regulating the use of the animal world with a consideration for the conclusions of the appropriate scientific organization and in coordination with interested state and public organizations.

Article 29. The rights of users of the animal world.

Enterprises, establishments, organizations and citizens have the right to make only those types of uses of the animal kingdom which they are permitted to.

In cases and in the manner which has been prescribed by the laws of the USSR and the RSFSR, the rights of users of the animal world can be limited for state interests and also in the interests of other users of the animal world.

Article 30. The duties of users of the animal world.

Depending on the type of use, users of the animal world are obliged to:

observe the prescribed rules of, norms and periods for using the animal world;

use the animal world in a manner which does not permit violations of the integrity of the natural association and which insures the preservation of animals which have not been allocated for use;

not violate the surroundings in which the animals live;

take stock of the number and condition of the animals being used and also of the condition of the surroundings in which they live;

carry out the necessary complex measures which are aimed at the reproduction of the animal world;

provide every possible assistance to the state and other bodies which are exercising control over the protection and use of the animal world;

take steps to create the necessary conditions for the protection and reproduction of rare and endangered species of animals.

The users of the animal world are also required to carry out the other requirements in the protection, reproduction and use of the animal world which have been provided for by the laws of the USSR and the RSFSR.

Article 31. The bases for suspending rights to use the animal world.

The right to use the animal world is subject to suspension either completely or partially in cases of:

- 1) The passing of the need for use or the repudiation of it;
- 2) The exploration of the prescribed period for use;
- 3) The origination of a need to withdraw from use subjects of the animal kingdom in order to protect the animals;
- 4) The elimination of an enterprise, establishment and organization which had been given the right to use them.

The right to use the animal world can also be suspended in a case where the user fails to follow the prescribed rules, norms and other requirements concerning the protection and use of the animal world.

Other bases for suspending the right to use the animal world can be provided for by the laws of the USSR and the RSFSR.

In the cases which have been provided for by paragraphs 1, 3 and 4 in the first part and by the second part of the present article, the right to use the animal world is suspended by the appropriate bodies annulling the permits which have been issued by them.

Section 3. Protection of the Animal World.

Article 32. Measures to protect the animal world.

The protection of the animal world is insured by:

- 1) Establishing rules and norms for protecting, rationally using and reproducing the animal world;
- 2) Imposing bans and limitations on the use of the animal world;
- 3) Protecting against the unwarranted use and other violations of prescribed procedures for using the animal world;
- 4) Protecting the environment in which the animals live, their reproduction conditions and migration paths;
- 5) Preventing the death of animals when carrying out production processes;
- 6) Creating game preserves and restricted areas and by setting aside other specially protected areas;
- 7) Breeding rare and endangered species of animals;
- 8) Limiting the taking of animals for zoological collections;
- 9) Helping animals when they are sick or threatened by death during natural disasters and as a result of other reasons;
- 10) Organizing scientific research aimed at substantiating measures to protect the animal world;
- 11) Instilling in citizens a humane attitude toward the animal world;
- 12) Publicizing the protection of the animal world through the mass information media;
- 13) Carrying out other measures and establishing other requirements for the protection of the animal world.

Article 33. Material and moral incentives to carry out measures to protect the ani_{mal} world.

Material and moral incentives for enterprises, establishments, organizations, and citizens, which stimulate the carrying out of measures to protect the animal world, can be established by the laws of the USSR and the RSFSR.

Article 34. Imposing limitations and bans on the use of the animal world.

For the preservation and reproduction of animals, the carrying out of individual types of uses of the animal kingdom and the use of individual types of animals can be limited or completely banned on a certain territory or for certain periods in the manner prescribed by the laws of the USSR and the RSFSR.

Article 35. Protecting the surroundings in which animals live, their reproduction conditions and migration paths.

Any activity, which affects the condition of the animal world by disrupting the surroundings in which the animals live, their reproduction conditions and migration paths, must be carried out by observing requirements which insure the protection of the animal world.

When siting, planning and constructing population centers, enterprises, structures and other installations; when improving existing and incorporating new technological processes; when putting virgin lands, swampy areas, and coastal areas covered with bushes into economic circulation; when reclaiming land; when using forests; when conducting geological survey operations; when mining useful minerals; when determining the sites of pastures and wells for agricultural animals; when developing tourist routes; and when setting up places for the mass rest of the population, measures must be provided for and carried out to protect the surroundings in which the animals live and their reproduction conditions, and the inviolatability of sections, which had special value as places where animals live, must be insured.

When siting, planning and constructing railroad, highway, pipeline and other transport mainlines; electrical transmission and communication lines; canals; dams and other hydrotechnical installations, measures which insure the preservation of the animal's migration paths must be developed and carried out.

Article 36. Coordinating the construction sites of enterprises, structures and other installations which affect the condition of the animals.

The construction sites of enterprises, structures and other installations which affect the condition of the animal world by disrupting the surroundings in which the animals live, their reproduction conditions and migration paths, are coordinated with the specially empowered state bodies for protecting and regulating the use of the animal world and with other bodies in accordance with the laws of the USSR and the RSFSR.

Article 37. Preventing the death of animals when performing production processes and operating transport systems.

Enterprises, establishments, organizations and citizens are required to take steps to prevent the death of animals when performing agricultural, logging and other operations and when operating transport systems.

The burning of dry vegetation and the storage of materials, raw materials and production wastes without carrying out prescribed measures to prevent the death of animals are forbidden.

Article 38. Protecting animals in game preserves, restricted areas and in other specially protected areas.

Hunting, fishing, the catching of aquatic invertebrates and sea mammals, as well as other types of using the animal world and other activity which are not compatible with the goals of preserving game, are forbidden on the territory of game preserves.

The carrying out of certain types of animal uses and other activity, which is not compatible with the goals of protecting the animal world, can be completely banned or limited in restricted areas and in other specially protected areas.

The procedure for protecting and using the animal world in game preserves, restricted areas and other specially protected places is established by the laws of the USSR and the RSFSR.

Article 39. Protecting rare and endangered species of animals.

In accordance with the USSR law "On Protecting and Using the Animal World", rare and endangered species of animals are entered in the books of rare and endangered species of animals and plants — the USSR Red Book and the RSFSR Red Book. The statute on the USSR Red Book is approved in the manner defined by the USSR Council of Ministers, and the statute on the RSFSR Red Book — in the manner defined by the RSFSR Council of Ministers.

Actions, which can lead to the death and a decrease in the number of rare and endangered species of animals or to the disruption of the surroundings in which they live, are not permitted.

Article 40. Measures to preserve rare and endangered species of animals.

In order to preserve rare and endangered species of animals whose reproduction is impossible under natural conditions, the specially empowered state bodies for protecting and regulating the use of the animal world must take steps to create the necessary conditions for the breeding of these species of animals.

Article 41. The procedure for catching rare and endangered species of animals.

The catching of rare and endangered species of animals for breeding under specially created conditions and their subsequent return to freedom and for scientific research and other purposes is permitted in accordance with a special permit issued by the specially empowered state bodies for protecting and regulating the use of the animal world.

Article 42. Zoological collections.

The creation and replenishment of zoological collections (the live collections of zoological parks, zoological gardens, aquariums, etc., as well as in the form of collections of stuffed animals, samples and parts of animals) by enterprises, establishments and organizations by removing the animals from their natural environment specifically for these purposes are permitted in accordance with permits issued by the specially empowered state bodies for protecting and regulating the use of the animal kingdom.

The replenishment of zoological collections, which are the private property of citizens, and the creation of new collections by citizens are forbidden with the exception of collections which consist of hunting and fishing trophies and other types of animal uses which are carried out in accordance with prescribed requirements.

Zoological collections, which have scientific, cultural, enlightenment, training, indoctrinational, or esthetic value, are subject to state registration. The enterprises, establishments, organizations, and citizens, which are the owners of these collections, are required to observe the rules for storing, registering and using the collections of animal world subjects.

In accordance with the USSR law "On Protecting and Using the Animal World", the rules for creating, replenishing, storing, using, and registering zoological collectives, the rules for trade by zoological collectives; and the rules for sending and exporting the items in the collection and the products of the animal world abroad are approved in the manner prescribed by the USSR Council of Ministers.

Article 43. Protecting animals during the use of plant protection means, growth stimulators, mineral fertilizers and other preparations.

The requirements for protecting the animal world and the surroundings in which the animals live must be taken into consideration when using plant protection resources, growth stimulators, mineral fertilizers, and other preparations which are used in the national economy. In order to decrease their harmful effect on the animal world, the use of chemical plant protection measures and other preparations must be combined with the carrying out of agrotechnical, selective genetic, biological, and other measures.

In order to prevent the death of animals and the deterioration of the surroundings in which they live, kolkhozes, sovkhozes, forest farms, and other enterprises, establishments, organizations, and citizens are required to observe the rules for transporting, storing and using these preparations.

When creating new preparations, standards for the maximum permissible concentration of them in the environment -- standards which insure the protection of animals and the surroundings in which they live -- must be developed.

The rules for using plant protection systems, growth stimulators, mineral fertilizers and other preparations which are used in the national economy, as well as the list of these preparations, are subject to coordination with the specially empowered state bodies for protecting and regulating the use of the animal world.

Article 44. The movement, acclimatization and cross-breeding of animals.

The movement of animals to new dwelling places, the acclimatization of animal species which are new to USSR fauna, and animal cross-breeding measures are permitted for scientific research and economic purposes with a consideration for the conclusions of the appropriate scientific organizations and in accordance with the permission of the specially empowered state bodies for protecting and regulating the use of the animal world.

The unwarranted movement, acclimatization and cross-breeding of animals is forbidden.

Article 45. Limiting the rights of and imposing obligations on the users of natural resources in order to protect the animal world.

In order to protect the animal world, the rights of users of the land, the forest, the water, and mineral riches can be limited and appropriate duties can be imposed upon them in the manner established by the laws of the USSR and the RSFSR.

Section 4. State Registering of Animals and the State Cadastre of the Animal World

Article 46. State registering of animals and their use and the state cadastre of the animal world.

In order to provide for the protection and to organize the rational use of the animal kingdom, a state registry of animals and their use is performed and a state cadastre of the animal world, which consists of all the information on the geographical distribution of the animal species (species groups), their number, the characteristics of the land required by them, the characteristics of the present-day economic use of animals, and other necessary information, is conducted.

Article 47. The procedure for the state registering of animals and their use and for the conducting of a state cadastre of the animal world.

In accordance with the USSR law "On Protecting and Using the Animal World", the state stock-taking of animals and their use and the conducting of a state cadastre of the animal world are accomplished at state expense according to systems which are common for the USSR.

Enterprises, establishments and organizations are required to submit the information available to them on the diffusion, number and use of wild animals to the organs which are conducting the state cadastre of the animal world.

The rules for the state stock-taking of animals and their use, for conducting the state cadastre of the animal kingdom for determining the lists of animal species (specie groups) which are subject to the state accounting and to inclusion in the state cadastre, and for submitting information for the stock-taking and conducting of the cadastre are approved in a manner prescribed by the USSR Council of Ministers.

Section 5. Control Over the Protection and Use of the Animal World

Article 48. State control over the protection and use of the animal world.

State control over the protection and use of the animal kingdom has as its task the insuring of the performance by all ministries; state committees and departments; state, cooperative and other public enterprises, establishments and organizations; and citizens of their duties in protecting the animal world and their observance of the prescribed procedure for using the animal world and of the other rules established by the laws on protecting and using the animal world.

Article 49. The bodies which exercise state control over the protection and use of the animal world.

State control over the protection and use of the animal world is carried out by the councils of peoples deputies, their executive and administrative bodies, and the specially empowered state bodies for protecting and regulating the use of the animal world in a manner prescribed by the laws of the USSR.

Article 50. Exercising state control over the protection and use of the animal world.

The specially empowered state bodies for protecting and regulating the use of the animal world check on:

the observance of the rules, norms, periods, and other requirements for protecting and using the animal world;

the observance of the prescribed procedure for the state registry of animals and their use and for the conducting of the state cadastre of the animal world;

the correctness and timeliness in developing and carrying out measures to preserve the surroundings in which animals live, their reproduction conditions and migration paths.

The specially empowered state bodies for protecting and regulating the use of the animal world have the right to:

halt the unwarranted use of the animal world and also uses, which are being carried out by violating prescribed rules, norms, periods, and other requirements for the protection and use of the animal world;

issue mandatory instructions on eliminating violations of the rules, norms, periods, and other requirements concerning the protection and use of the animal world;

halt operations, whose conduct systematically violates the rules, norms, and other requirements concerning the protection and use of the animal world and the protection of the surroundings in which the animals live, their reproduction conditions and migration paths until the violations have been eliminated;

institute proceedings in the prescribed manner against violators of the rules, norms, periods, and other requirements concerning the protection and use of the animal world or send the material on their violations to the appropriate bodies.

The specially empowered state bodies for protecting and regulating the use of the animal world can be granted other rights to prevent and stop violations of the rules, norms, and other requirements concerning the protection and use of the animal world by laws of the USSR and the RSFSR.

Article 51. The obligation to carry out the rules and instructions of the specially empowered state bodies for the protection and regulation of the use of the animal world.

The rules and instructions of the specially empowered state bodies for the protecting and regulating the use of the animal kingdom, which have been approved within the rights established by the laws of the USSR and the RSFSR, are binding for execution on all ministries, state committees and departments, enterprises, establishments, organizations, and citizens.

Article 52. Departmental control over the protection and use of the animal world.

Departmental control over the protection and use of the animal world is carried out by the organs under whose jurisdiction the enterprises, establishments and organizations, which are using the subjects of the animal world, are located.

When exercising departmental control, the ministries, state committees and departments are required to be guided by the laws of the USSR and the RSFSR and the rules and instructions which have been approved by the specially empowered state bodies for protecting and regulating the use of the animal world.

Section 6. Solving Disputes Concerning Questions on Using the Animal World

Article 53. The procedure for solving disputes concerning questions on the use of the animal world.

Disputes between enterprises, establishments, organizations, and citizens on matters pertaining to the use of the animal world are solved in a manner prescribed by the laws of the USSR and the RSFSR.

Section 7. Responsibility for a Violation of the Laws on Protecting and Using the Animal World.

Article 54. The invalidity of agreements which violate the right of state ownership of the animal world.

The unwarranted giving up of the right to use subjects of the animal world and other agreements, which openly or secretly violate the right to state ownership of the animal world, are invalid.

Article 55. Responsibility for a violation of the laws concerning the protection and use of the animal world.

Persons who are guilty of concluding deals, which are mentioned in Article 54 of the present law, and who are guilty of:

the unwarranted use of subjects of the animal world;

a violation of the rules concerning hunting, fishing and other types of use of the animal world;

a violation of the rules on protecting the surroundings where the animals live and their migration paths;

the unwarranted movement, acclimatization and cross-breeding of animals;

a violation of the rules on using plant protection systems, growth stimulators, mineral fertilizers, and other preparations which cause harm to the animal world;

a violation on the rules for sending and exporting the subjects of the animal world and zoological collections abroad;

committing actions which have led to the death, a decrease in the number, or the disruption of the surroundings in which the animal species, which are listed in the RSFSR Red Book, live;

are criminally , administratively or otherwise responsible in accordance with the laws of the USSR and RSFSR.

Responsibility for other violations of the laws concerning the protection and use of the animal world can also be prescribed by laws of the USSR and the RSFSR.

Article 56. Compensation for the harm caused by a violation of the laws concerning the protection and use of the animal world.

Enterprises, establishments, organizations and citizens are required to compensate for the damage caused by a violation of the laws concerning the protection and use of the animal kingdom in the amounts and manner prescribed by the laws of the USSR and the RSFSR. The officials and other workers, due to whose fault the enterprises, establishments and organizations incurred the expenses which were connected with compensating for the loss, are materially responsible in the manner prescribed.

Illegally caught animals and the products obtained from them are subject to removal in the manner prescribed by the laws of the USSR and the RSFSR.

When it is impossible to remove the illegally caught animals and the products obtained from them, their cost is exacted in accordance with prices which are established by the laws of the USSR and the RSFSR.

Section 8. International Treaties.

Article 57. International treaties.

If other regulations than those, which are contained in Soviet laws concerning the protection and use of the animal kingdom, have been prescribed by an international treaty of the USSR, then the rules of the international treaty are applicable.

The same procedure is applicable in regards to the RSFSR laws concerning the protection and use of the animal world if rules other than those prescribed by RSFSR laws on the protection and use of the animal kingdom, have been prescribed in an international treaty of the RSFSR.

Chairman of the Presidium of the RSFSR Supreme Soviet M. Yasnov

Secretary of the Presidium of the RSFSR Supreme Soviet Kh. Neshkov

Moscow, Kremlin, 14 July 1982

Decree of the RSFSR Supreme Soviet on the Procedure for Implementing the RSFSR Law "On Protecting and Using the Animal World"

In connection with the adoption of the RSFSR law "On Protecting and Using the Animal World", the Supreme Soviet of the Russian Soviet Federated Socialist Republic resolves:

- 1. To implement the RSFSR law "On Protecting and Using the Animal World" on 1 November 1982.
- 2. To establish that the RSFSR law "On Protecting and Using the Animal World" is applicable to those relations which arise after the implementation of the law, that is, after 1 November 1982.

In the legal relationships which arise prior to the implementation of the RSFSR law "On Protecting and Using the Animal World", the exercise of the rights and duties of the participants in these legal relationships are to be regulated in accordance with the mentioned law beginning on 1 November 1982.

- 3. The rules, which have been established by the USSR law "On Protecting and Using the Animal World" and which are contained in the RSFSR law "On Protecting and Using the Animal World", are applicable from the date of the implementation of the USSR law, that is from 1 January 1981, in accordance with the decree of the USSR Supreme Soviet dated 25 June 1980 entitled "On the Procedure for Implementing the USSR Law 'On Protecting and Using the Animal World" (VEDOMOSTI VERKHOVNOGO SOVETA SSR, No 27, 1980, Art. 531).
- 4. To charge the Presidium of the RSFSR Supreme Soviet with bringing RSFSR laws into accordance with the RSFSR law "On Protecting and Using the Animal World".

5. The RSFSR Council of Ministers:

with determining the procedure for approving the RSFSR Statute on Public Hunting Inspectorates;

with bringing the decision of the RSFSR government into accordance with the RSFSR law "On Protecting and Using the Animal World".

Chairman of the Presidium of the RSFSR Supreme Soviet M. Yasnov

Secretary of the Presidium of the RSFSR Supreme Soviet Kh. Neshkov

Moscow, Kremlin, 14 July 1982

8802

SOCIALIST APPROACH TO ECOLOGICAL PROBLEMS LAUDED

Vilnius SOVETSKAYA LITVA in Russian 15 Sep 82 p 2

[Article by V. Kortunov, doctor of historical sciences, political observer of press agency Novosti: "Socialist Approach to Solving Ecological Problems"]

[Text] The history of interrelationships of man with nature is a type of paradox. On the one hand, our dominance over the elemental forces of nature is constantly rising, and fear of them is replaced by sensible forecasts and realized transformation of the climate of whole regions. On the other hand, this dominance is becoming more illusionary. The victory often becomes defeat, and at the end of the 20th century, man is faced with the most evil spectre of ecological apocalypse.

The scientist speaks of different variants for possible ecological catastrophe awaiting mankind. One of them focuses attention on the steady increase in the percentage in carbon dioxide in the earth's atmosphere. This process, they believe, in the next decades can convert the earth into a greenhouse absorbing considerably more solar energy than today. Others assert that the earth is threatened not by an increase, but a decrease in temperature which is becoming an inevitable consequence of the growing dust content in the earth's atmosphere. Others say that the main threat is not the change in temperature, but the destruction of the ozone screen in the strat sphere of earth. The main screen which can be destroyed by flights of supersonic airplanes, protects people and animals from ultraviolet radiation.

One could cite many other, no less sinister forecasts. But it is clear that there is an unequivocal answer to the question of whether man is threatened by an ecological catastrophe: yes he is. It is much more important to clarify how this catastrophe can be prevented. However it is much more difficult to find here an unequivocal answer.

Ecology and the Social Structure

Is there a link between ecological problems and social-economic structure? The bourgeois scientistsmost often negate it. The ecological crisis, they assert, is a consequence of purely economic and not social processes. The Marxists believe that one can only discuss the problem of the economical crisis from class positions. It is primarily necessary to answer the question of who specifically bears primary responsibility for environmental pollution.

Large enterprises which in the West are in the hands of private owners are generally oriented on obtaining the maximum profit with the minimum outlays. Consequently, ecological requirements objectively and inevitably are thrown by the board of the economic system of capitalism, since the products become more expensive and they are made less competitive.

Practice shows what the attempts to solve ecological problems without a desire to gain profit can lead to at times. Under pressure of the public, the United States in recent years, for example, has created highly effective means of monitoring the quality of the air basin and the internal waters, as well as equipment for controlling environmental pollution. However, the increase in ecological standards in the United States namely resulted in a drastic deterioration in the ecological situation in a number of developing countries where the American monopolies transferred the most "dirty" industries.

The concept of introducing new economic mechanisms for monitoring the quality of the environment has been widely discussed recently in the scientific circles of the Western countries. A universal tax, the introduction of rent payments with each economic unit for the use of nature must become the core of this monitoring. This would make it possible to transform the "external cost" of society into "internal" outlays of the private producers. But in practice, this approach may result in a new flight of consumer prices under the pretense of increasing the "ecological costs."

In order to prevent ecological catastrophe, the western scientists have presented the requirements to limit the economic growth. But this approach is utopic, and essentially only detracts from the true solution of ecological problems.

New Approach to Ecological Problems

One of the lessons of the current ecological problems is an understanding that the nature surrounding us is a very complicated, and not yet completely studied system whose functioning depends on all of its components. Since this is so, environmental protection in order to produce positive results must be comprehensive and systematic.

Socialism from this viewpoint has undoubted advantages over capitalism. Private ownership extremely impairs the comprehensive approach to ecological problems if it does not altogether exclude it. Only the socialist state can effectively regulate the use of nature and environment protection. It has a precise plan for functioning of social productive forces and completely controls their development.

The importance of environmental protection is secured in the most important legislative acts of the Soviet state. The USSR constitution notes: "The citizens of the USSR are obliged to guard nature, and preserve its riches" (article 67).

The Soviet environmental protection program, and this is its significant advantage over the majority of estern countries, is distinguished by consistency and constancy. From the first days of Soviet power we have conducted long-term and broad-scale measures for restoration and protection of the natural resources of the country, reducing to a minimum the unfavorable consequences of production activity. It is not out of place to recall that the Soviet Union was the first country in the world where scientifically substantiated, maximum permissible standards for concentration of harmful substances in the atmosphere were first developed.

In recent years the USSR Supreme Soviet has adopted a number of important laws aimed at protecting the environment from effects harmful for it: "Fundamentals of Land Legislation of the USSR and Union Republics," "Fundamentals of the Legislation of the USSR and Union Republics Regarding the Depths," "Fundamentals of Water Legislation of the USSR and Union Republics," and others. The government of the USSR has also issued a number of decrees on measures for further improvement in environmental protection and the efficient use of natural resources, in particular for the protection of the Caspian, of Black and Azov basins of the Volga and Ural rivers.

But to issue a law is still little in order to help nature. It is necessary to reinforce it with solid capital investments. Here we again must speak about the advantages of the socialist system. In 1976-1980 the Soviet state allocated over R 26 billion for environmental protection measures.

The USSR State Committee for hydrometeorology and monitoring of the environment plays a large role in environmental protection. It has its own territorial administrations and centers to monitor pollution of the environment in the entire country. The powers of the committee are very significant. For example, according to the results of the ecological examination, over 300 enterprises were moved beyond the limits of Moscow, and now other productions which do not pollute the atmosphere are in there former structures. In planning enterprises, ecological expertise is mandatory.

The development of new territories in the north and east of our country raises new ecological problems which in their scales do not have a precedent in world practice. For example, the development of the zone of the Baykal-Amur Trunkline under construction alone should result in an increase in the population of Siberia several times, the development of large industrial centers, and the working of mineral fields. At the same time it is known that ecological balances in the northern regions are especially unstable and the slightest lack of caution can result here in the most fatal consequences.

One of the important forms of protecting environment under conditions of economic development of the new territories is the creation of state preserves which become a type of reference for natural ecological complexes. Today we have 136 state preserves. They occupy 11 million hectares. By the end of the current five-year plan, another 20 preserves will be created. In addition there are 1,500 sanctuaries where in contrast to the preserves, not the entire natural complex, but only individual elements are under special protection (vegetation, all or some species of animals etc.).

The experience of the USSR in environmental protection graphically demonstrates the advantages of the comprehensive approach to the ecological problem which makes it possible to develop a strategy of economic development which would not result in irreparable destruction of the environment. This experience also indicates that the ecological problem is nevertheless primarily a social problem, and its solution is only possible based on deep social transformation of society.

9035

OFFICIALS' STATEMENTS REFLECT ENVIRONMENTAL POLICY CHANGE

Hamburg DER SPIEGEL in German 11 Oct 82 p 23

[Text] Within 2 days after being sworn in, CSU Minister of the Interior Fritz Zimmermann introduced an abrupt change in constitutional state, environmental and foreign policies. during a discussion with all department heads last Wednesday, the new chiefs, parliament secretaries Carl-Dieter Spranger (CSU) and Horst Waffenschmidt (CDU), supported by the old civil servants Guenther Hartkopt (FDP) and Siegfried Froehlich (CSU supporter), prepared the government declaration of domestic policy. Hartkopf excelled as executor of the new team.

He reported what Chancellor Helmut Kohl is to pronounce as measure against dying forests. He stated vaguely that air pollution caused by sulfur dioxide is to be reduced. The head of planning, Klaus Thomsen, found this to be too weak: Zimmermann's predecessor Gerhart Baum had already decided on maximum allowable levels. Said Thomsen: "400 mg has been named. Don't you want to name this?" Hartkopf looked questioningly to his colleagues who did not show any reaction. Then Hartkopf aid: "Yes, good, then we will name it."

The head of environmental policy, Peter Menke-Glueckert (FDP), reacted happily:
"It is most important that the continuity of the environmental policy is emphasized.
Spranger answered: "We don't want this continuity. It is precisely this insecurity caused by the environmental policy that we want to put a stop to. It is because of this insecurity that the young voters have deserted us to join the environmentalists."

When Hartkopt said, somewhat perplexed, that parameters for sulfur dioxide pollution are to be taken "as had been discussed," Thomsen spoke again: "Now you did not take into consideration what Mr. Spranger has said. As I understand him, he wants to see a precise demonstration of the difference between the new and the old environmental policy."

Spranger nodded agreement, and Hartkopf added: "Yes, the old policy was not reliable because something new was happening at the time."

Thomsen answered: "Then you should inform the vice chancellor, who is probably interested in seeing how the continuity is protrayed by three FDP ministers."

9328

cso: 5000/2509

GOVERNMENT COMMISSION TO TEST, APPROVE CHEMICAL SUBSTANCES

Stockholm SVENSKA DAGBLADET in Swedish 29 Sep 82 p 8

[Article by Claes-Göran Kjellander]

[Text] No later than this fall the government will appoint a poisons and chemicals commission. Within a specified time it will coordinate the work on increasing control over the use of chemicals.

The chemicals commission will work in about the same way as the energy commission in its time. This means among other things that both scientists and politicians will be represented on the commission. Its function will be to provide a basis for decisions, but it will not have any executive powers itself.

The idea of a poisons and chemicals commission has long been entertained among the Social Democrats, and has been presented in several party resolutions.

Control in Advance

One of the most urgent tasks is considered to be getting control of chemical substances and products in advance, before they are put into practical use. For such a control to be put into effect, the public will have to have laboratory resources that are lacking today.

It will therefore be the task of the commission to find out what changes will have to be made for the authorities to cope with the job of checking out new products.

One prerequisite for product control, however, is a complete product register. Year after year the Social Democrats have subjected the non-socialist governments to sharp criticism on the ground that the product register is going too slowly.

An obligatory check in advance would mean that all products that are not on the register must go through an analysis at the manufacturer's or importer's expense. The analysis would clarify what health risks are connected with the product, and provide information to the hygiene authorities and the user by a code marking in the product register.

The Social Democrats have also pushed several environmental questions very hard during their time in the opposition. This applies among other things to the

rules for forest spraying and for lead content of gasoline.

It is uncertain whether the party will now get the Riksdag to change the rules on forest spraying for the fourth time in 2 years. The big forest owners have now adapted to the dispensing rules that the Riksdag introduced last spring to be effective during 1982, and another change would cause great problems.

8815

BILL WOULD INCREASE PENALTIES FOR SHIPS DISCHARGING OIL

Stockholm SVENSKA DAGBLADET in Swedish 30 Sep 82 p 5

[Article by Claes Löfgren]

[Text] Tougher penalties await owners of vessels that discharge oil in Swedish waters. Fines of nearly half a million kronor can be assessed in case of illegal discharges.

The bill to amend the water pollution law has now been submitted to the Law Council. It provides among other things that:

- The vessel's owner can be subjected to high fines.
- \bullet The fines range between 5,000 and 400,000 kronor depending on the size of the discharge.
- The Coast Guard or the National Administration of Shipping and Navigation can forbid vessels to leave port to confirm evidence and guarantee that fines imposed are paid.

Under the present legislation it is hard to make the shipping companies responsible for oil and chemical discharges. In practice that has never been done. Instead, relatively light fines have been imposed on the officers and/or crew of vessels caught in illegal discharges.

First Mate Convicted

The law was made more severe a few years ago, so that those responsible for the discharge could be sentenced to up to 2 years' imprisonment. But so far imprisonment has been allotted in only one case. The first mate of a Greek vessel was sentenced to 1 month for having pumped out 75 tons of heavy oil in the Askerö Fjord on the west coast.

In other cases the penalties for oil and chemical discharges have been fines of a few thousand kronor. With the proposed changes it is hoped that the government can now frighten both Swedish and foreign shippers into obeying the law.

Negligence or Intent

A study by the UN maritime agency IMCO [Inter-Governmental Maritime Consultative Organization] shows that only about a third of the world's oil discharges

occur in connection with shipwrecks. The rest--over 1 million tons of oil--is discharged either because of negligence or quite consciously in order to reduce the time in port and consequently the costs.

Two consultative bodies—the bar association and the shippers' association—considered the bill unnecessary. They feel that the intentional discharges are so slight that their damaging effects on the environment are hard to prove. The lawyers and shippers also say that the present legislation is quite adequate. Making the law more severe would not reduce the discharge.

The reason—according to the two consultative bodies—is that the risk of detection is so slight. Illegal discharges often take place under cover of fog and darkness. A study of discharges in American waters claims that only some 20 percent of all illegal discharges are detected. Instead it is argued that the coast guard should be given increased resources for a more effective patrol by boat and by air.

Discharges	Due	tο	0i1	Shipments	Worldwide
D + 0 C 11 G + 5 C 0					

Cause of Discharge Amou	ınt in Tons	Percent
Tank cleaning	709,000	47
Tank cleaning in connection with stay at shipyard	34,000	2
In connection with loading, unloading, bunkering	40,000	7.3
Discharge of ballast and bilge water	314,000	21
Shipwrecks	406,000	27
•	1,503,000	100

The table shows that purely intentional oil discharge together with discharge as a result of negligence accounts for nearly 70 percent of the total.

Source: IMCO (maritime organization of the United Nations)

Shipping Company Responsible

The bill also makes the shipping company responsible if adequate measures are not taken in connection with an accident that causes oil discharge.

In the mid 1970's an Argentine dry-cargo vessel ran aground off the Danish coast on the Öresund side. Fifty tons of heavy oil leaked out of the fuel tanks and no attempt was made to clean up the oil. The discharge caused polected beaches, and death of sea birds along the stretch of coast between Helsinki and Kiel.

The clean-up cost the state 0.5 million kronor. The captain was given fines of 15 kronor a day for 100 days. Under the proposed changes in the law the Argentine shipping company could also have been held responsible.

When the Law Council has had its say the government will write a bill. Some time in November the Riksdag will decide on it.

8815

'ACID RAIN' IS CATALYST FOR ARSENIC DISCHARGES

Stockholm SVENSKA DAGBLADET in Swedish 17 Oct 82 p 8

[Text] Acidification has created an environmental threat and a health hazard around 30-50 old impregnation works for telephone poles, railroad sleepers, etc. The fields around each of them contain at least 10 tons of arsenic, which will now have to be released from the acid rain.

The National Swedish Nature Conservancy Board is right now in the process of studying the risks. A final report is expected to be ready by the end of the year. However, as a result of information which has become available, Eksjo municipality, among others, which has an impregnation works at Hjaltevad, has decided to examine the local well-water.

High Content in Puddles

The groundwater around the impregnation works has turned out to contain 2.8 milligrams of arsenic per liter. Rain water puddles in the vicinity were found to contain up to 6 milligrams per liter.

The limit value set by the World Health Organization WHO for arsenic in drinking water is 0.05 milligrams per liter. The Swedish limit value is now at 0.20 milligrams, but an adjustment to the WHO value has been discussed.

Fields, too, are full of arsenic. The soil around the impregnation works at Stromsholm southwest of Vasteras contains 300-3,000 milligrams of arsenic per kilogram, a total of approximately 10 tons.

It is a question of old impregnation works from the forties. New impregnation works, built according to the building codes of 1978, do not present the same environmental threats.

The Swedish Nature Conservancy Board is now also studying counter-measures. Liming does not solve the problem. The polluted soil may be removed, alternatively, ways of rebinding the arsenic more permanently to the soil of the fields may be tested.

STOCKHOLM POLICE CRACK DOWN ON EXCESS CARBON MONOXIDE FROM CARS

Stockholm SVENSKA DAGBLADET in Swedish 19 Oct 82 p 10

[Article by Henrik Ekman]

[Text] Warning to all motorists with excess carbon monoxide levels in their exhaust emissions. The carbon monoxide police patrols of Stockholm have gone into action. The result: considerably higher carbon monoxide levels than at the official motor vehicle inspections.

Since its initiation, the crackdown has resulted in a busy week. At five locations, officers of the Environmental Conservancy Board have been testing the exhaust emissions of motor vehicles checked by the police patrols.

The officers of the Environmental and Public Health Board will find out whether vehicles observe the limit values set for carbon monoxide (CO) levels also at other times of the year than at the annual inspections.

"Of course, we always hear of people readjusting their carburetors after leaving the motor vehicle inspection station," says Ingemar Josefsson, commissioner of the Environmental Conservancy Board (Social Democrat).

The cooperation started by the municipal authorities of Stockholm with the traffic police appears to confirm this impression. The carbon monoxide levels of a larger number of motor vehicles have been found to exceed the limit values than at the inspections carried out by the Swedish Motor Vehicles Inspection Company.

Crackdown South of Stockholm

Last Monday, action was taken at the Circular Road at Tantolunden. In a parking area, two technicians of the Environmental Conservancy Board were standing next to a large number of traffic police officers.

After the police had carried out its usual checks of lights, brakes, tires, and driver's licences, the motor vehicles were directed to proceed to the carbon monoxide testing area. A cord was inserted into the exhaust pipe, and the result appeared immediately on the instrument in the bus. The

needle showed with relentless precision whether the motor vehicle would be approved, whether attention would have to be called to its level of carbon monoxide or whether it would have to be directed to a motor vehicle repair shop.

A total number of 37 motor vehicles were inspected at the Circular Road check point. The four previous check-point inspections—at Majrovagen, Alvsjovagen, Vårbergsvagen and Soder Malarstrand—comprised between 130 and 140 motor vehicles. That is a far too small number for any definite conclusions to be drawn from it. The aim is to inspect a total number of 1,000 vehicles. Nevertheless, some results may be mentioned.

Roughly, between 30 and 40 percent of the motor vehicles inspected were found not to come up to the standard required, i.e. the levels of carbon monoxide in their exhaust emissions were found to exceed 4.5 percent. Although the limit value has been set at 4.5 percent, it has been the practice for motor vehicle inspectors merely to draw the attention of motorists to levels up to 7 percent. Only above that level will the motor vehicle be subject to reinspection.

According to the initial material gathered by the 'Carbon Monoxide Police," 24-31 percent of the motor vehicles examined had levels of carbon monoxide between 4.5 percent and 7 percent. A total number of 10 percent had even higher levels.

The motor vehicles checked at the Circular Road followed the same trend.

The above figures may be compared to the statistics for 1981 published by the Swedish Motor Vehicles Inspection Company, Inc. Here, only 11 percent of the motor vehicles examined had levels of carbon monoxide above 5.5 percent (no statistics is available on the number of motor vehicles with levels above the 4.5 percent). Only 3.2 percent of these vehicles had levels of carbon monoxide in their exhaust emissions above the 7 percent level when leaving the Swedish Motor Vehicles Inspection Company, Inc.

The present carbon monoxide levels are thus considerably higher than the levels recorded for a long time by the carbon monoxide inspection patrols.

"It is our aim that motorists become aware of their exhaust emissions throughout the year," Ingemar Josefsson says. "If there is a risk that their motor vehicles may run into a check-point inspection and be rejected, they may want to ask their repair shops to take a look at their carbon monoxide levels as well when they bring their motor vehicles in for repairs."

7262 CSO: 5000/2511

END